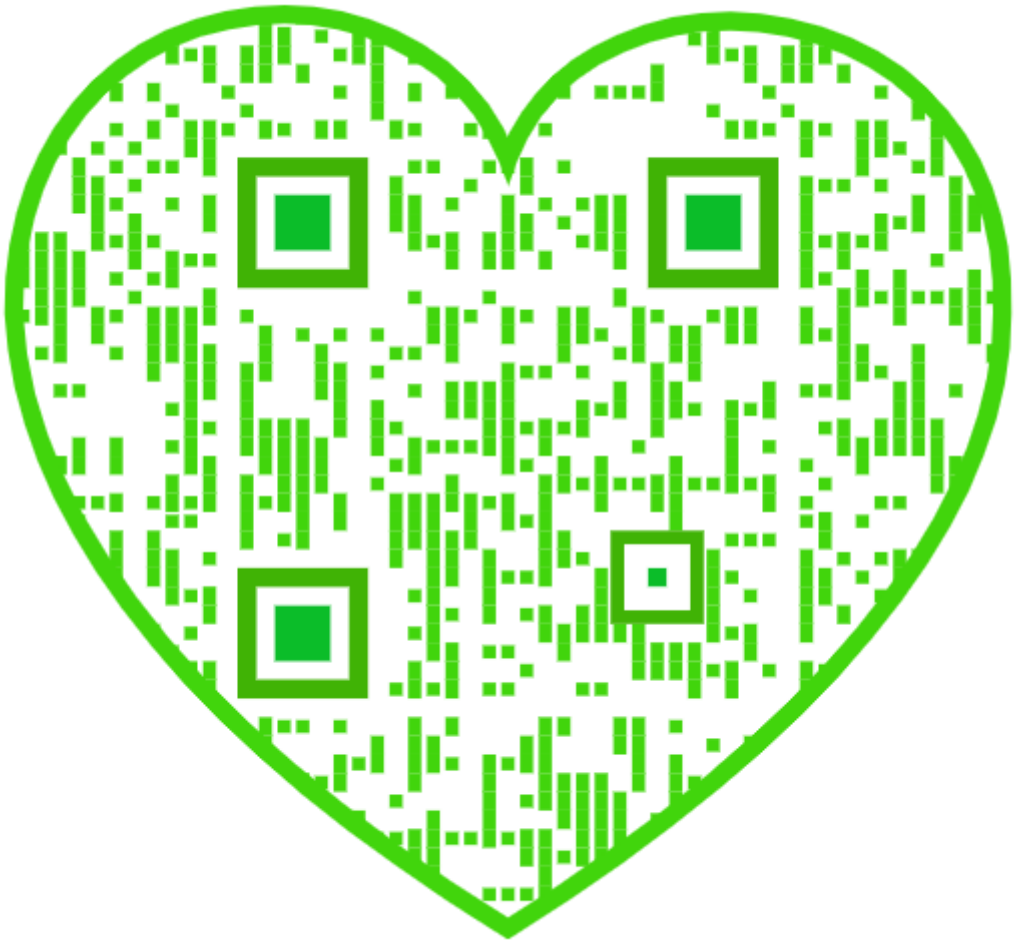


# TEACHING HOME ECONOMICS

THE MACMILLAN COMPANY
NEW YORK · BOSTON · CHICAGO · DALLAS
ATLANTA · SAN FRANCISCO

MACMILLAN & CO., LIMITED
LONDON · BOMBAY · CALCUTTA
MELBOURNE

THE MACMILLAN CO. OF CANADA, LTD.
TORONTO

# TEACHING HOME ECONOMICS

BY

ANNA M. COOLEY, B.S.
ASSOCIATE PROFESSOR OF HOUSEHOLD ARTS EDUCATION

CORA M. WINCHELL, B.S.
ASSISTANT PROFESSOR OF HOUSEHOLD ARTS EDUCATION

WILHELMINA H. SPOHR, M.A.
ASSISTANT PROFESSOR OF HOUSEHOLD ARTS EDUCATION

JOSEPHINE A. MARSHALL, B.S.
INSTRUCTOR IN HOUSEHOLD ARTS EDUCATION

TEACHERS COLLEGE
COLUMBIA UNIVERSITY
NEW YORK

New York
THE MACMILLAN COMPANY
1921

*All rights reserved*

Copyright, 1919,
By THE MACMILLAN COMPANY.

Set up and electrotyped. Published September, 1919.

Norwood Press
J. S. Cushing Co. — Berwick & Smith Co.
Norwood, Mass., U.S.A.

THIS BOOK IS DEDICATED TO

HELEN KINNE

BY THE AUTHORS

IN BEHALF OF HER MANY STUDENTS AS WELL AS FOR THEMSELVES, IN PROFOUND APPRECIATION OF HER ENNOBLING INFLUENCE AS A TEACHER, FRIEND, AND CO-WORKER, AND OF HER GREAT SHARE IN THE ESTABLISHMENT OF IDEALS IN THE TEACHING OF HOME ECONOMICS WHICH HAVE RAISED IT TO THE PLANE WHICH IT NOW HOLDS IN THE EDUCATIONAL WORLD

# PREFACE

THE object of this book is to offer suggestions for the organization, administration, and teaching of the home economics studies. In the preparation of the book the authors have endeavored to adapt it to the various types of persons whose needs they hope to serve.

Before the war these studies were recognized by some as an essential part of the general education of every girl. With the declaration of peace, they assume a new significance and appear as an indispensable part of her education. This is true because every girl needs instruction regarding better and more healthful living, and training in those practices which will enable her to live her daily life more intelligently, to rear her children more thoughtfully, and to serve her community and country more efficiently. These studies are needed by some because they prepare also for certain definite wage-earning vocations. This book draws the distinction between home economics studies as organized for general or liberal education purposes and such lines of specialized vocational training as may have grown out of them.

It is the conviction of the authors that only through a closely woven course involving both theory and practice can the subject matter offered have any real value to the students. The book presupposes courses in the various phases of Home Economics, — practical, scientific, artistic, economic, and sociological, — of greater or less intensity. In other words, it is taken for granted that the student who will use it will be familiar with the scope of the field, and that her course in methods will serve as a means of evaluating and unifying the material she gains through her technical courses, and interpreting it in terms of elementary and secondary school teaching.

This book is intended for use as a text primarily in normal schools and colleges where students are in training as teachers of the home economics studies, and by teachers in service. It is hoped that it may also prove of value to superintendents of schools, principals, and directors of schools who have the problem of introducing these studies into the curriculum for either general liberal education or vocational purposes. Social workers, vocational advisers, and lay readers interested in these studies as a phase of the life and education of the girl, will find in this book suggestions which the authors hope may prove of value in introducing these studies under varying conditions.

It is the hope of the authors that in short courses in the training of home economics teachers, instructors will choose from the material presented that which is vital to their specific needs, whereas teachers of educational methods in the field of Home Economics will in many instances find it necessary to expand the material offered by a liberal use of the references.

It is hoped that the outlines and the suggestions for study and review in the various chapters may prove suggestive as a basis for study and discussion in the training classes using this book as a text. It is urged that the instructor in the conduct of her class develop *with them* original problems appropriate to their own needs as discovered in their practice teaching, or growing out of the needs of their own environment.

Every effort has been made to attack the subject in the light of the new vision of education as a factor in social evolution, and it is urged that teachers who may use the book will constantly consider the trend of events and modify the text to keep abreast of the times. Just as adaptation has been made the burden of the message throughout the book, so it is the hope of the authors that the text will be adapted by the instructors to the peculiar needs of the classes whom it serves, as well as to the world conditions as they develop.

# TABLE OF CONTENTS

## PART I

## HOME ECONOMICS AS AN ORGANIZED STUDY IN THE SCHOOL PROGRAM


PAGE

CHAPTER I. THE RESPONSE OF WOMANHOOD TO MODERN SOCIAL DEMANDS . . . . . 3

Women in colonial times . . . . . 3
The effect of economic and social changes on the home . . 8
The responsibilities of women to-day . . . . . 13

CHAPTER II. THE RESPONSE OF EDUCATIONAL AGENCIES TO THE NEEDS OF WOMEN . . . . . 20

Introduction . . . . . 20
The response through elementary and secondary schools . . 21
The response through higher institutions of learning . . . 30
Other educational agencies . . . . . 31

CHAPTER III. THE DEVELOPMENT OF HOME ECONOMICS IN RESPONSE TO THE NEEDS OF THE GIRL . . . . . 37

Home Economics in the schools of to-day . . . . . 37
The evolution of Home Economics leading up to these studies in schools of to-day . . . . . 41
The scope of the home economics studies of to-day . . . 49
Home Economics in the schools of to-morrow . . . . . 57

CHAPTER IV. THE INTERRELATION OF HOME ECONOMICS WITH OTHER SUBJECTS IN THE CURRICULUM . . . . . 64

The modern tendency in education toward unification of the curriculum . . . . . 64
The opportunities for correlating Home Economics with other subjects . . . . . 67

## PART II

### ORGANIZATION OF COURSES OF STUDY IN HOME ECONOMICS

PAGE

CHAPTER V. VARIOUS SCHEMES OF ORGANIZATION OF THE ELEMENTARY AND THE HIGH SCHOOL . . . . . 83
Introduction . . . . . 83
The elementary school . . . . . 84
The high school . . . . . 86
The rural school . . . . . 88

CHAPTER VI. HOME ECONOMICS IN THE ELEMENTARY SCHOOL . 91
Relation of the home economics studies to the work of the first six grades . . . . . 91
Home Economics in the seventh and eighth grades . . . 103

CHAPTER VII. HOME ECONOMICS STUDIES IN THE HIGH SCHOOL. 123
Section I. . . . . 124
Introduction . . . . . 124
Home economics studies in the four-year high school . . 125
Section II . . . . . 166
Home economics studies in the junior high school . . . 166
Home economics studies in the senior high school . . . 176
Home economics studies in the small high school . . . 179
Section III . . . . . 181
Home economics studies in evening classes and continuation courses . . . . . 181

CHAPTER VIII. HOME ECONOMICS IN RURAL SCHOOLS . . . 193
The rural situation . . . . . 194
A field of interest to teachers of Home Economics . . . 195
Home economics extension service . . . . . 200
Home Economics in the rural schools . . . . . 203
Home Economics in the one-teacher school . . . . . 209
Home Economics in the consolidated school . . . . . 226
Home Economics in the rural high school . . . . . 232

CHAPTER IX. HOME ECONOMICS IN OTHER ORGANIZATIONS WHICH CONTRIBUTE TO THE EDUCATION OF THE GIRL. . . . 245
Organizations other than schools, which contribute to the education of the girl along lines of Home Economics . . . 245

## PART III

### PLANNING LESSONS IN HOME ECONOMICS

PAGE

CHAPTER X. SOME SUGGESTIONS FOR CHARACTERISTIC LESSONS IN HOME ECONOMICS . . . . . 269
The necessity of planning for a lesson . . . . . 269
Suggestions for characteristic lessons . . . . . 270

CHAPTER XI. A STUDY OF BASIC ELEMENTS IN PLANNING THE INDIVIDUAL LESSON . . . . . 288
The importance of careful foresight in planning lessons in Home Economics . . . . . 288
The planning of the lesson . . . . . 292

CHAPTER XII. MANAGEMENT PROBLEMS . . . . . 309
Good management a phase of good teaching . . . . . 309
Factors that contribute to classroom efficiency . . . . . 309
Administrative problems of the department . . . . . 319

CHAPTER XIII. STANDARDS FOR TESTING METHODS OF INSTRUCTION IN HOME ECONOMICS . . . . . 332
The quality of instruction . . . . . 332
The aims of instruction . . . . . 333
The main objects or purposes of instruction in the teaching of home economics subjects . . . . . 334
Factors worthy of acceptance as standards in judging method . 335
Home economics studies are social studies . . . . . 338
The best modern methods are possible . . . . . 338

## PART IV

### PERSONNEL, MATERIALS, AND OPPORTUNITIES IN THE TEACHING OF HOME ECONOMICS

CHAPTER XIV. THE TEACHER AND THE SUPERVISOR OF HOME ECONOMICS . . . . . 343
The teacher and the supervisor of Home Economics . . . 343
The preparation of teachers of Home Economics . . . 349
The training of the supervisor of Home Economics . . . 355

PAGE

CHAPTER XV. UTILIZATION OF COMMUNITY INTERESTS IN THE TEACHING OF HOME ECONOMICS . . . . . 359
The close interrelation of school and world interests . . . 359
Possibilities for interweaving school and community interests through the home economics studies . . . . . 364

CHAPTER XVI. EQUIPMENT FOR TEACHING HOME ECONOMICS . 374
General discussion of equipment for teaching Home Economics . 374
Various types of school equipment . . . . . 386
Charts, exhibits, and other illustrative material . . . . 398
Suggested lists of equipment . . . . . 401

CHAPTER XVII. LITERATURE . . . . . 417
Available literature in Home Economics . . . . . 417
The division of the bibliography . . . . . 420

PART V

ADDENDA . . . . . 449

# PART I

## HOME ECONOMICS AS AN ORGANIZED STUDY IN THE SCHOOL PROGRAM

# TEACHING HOME ECONOMICS

## CHAPTER I

### THE RESPONSE OF WOMANHOOD TO MODERN SOCIAL DEMANDS

I. Women in colonial times.
   A. Their life in home and community.
   B. The education of girls for womanhood.
II. The effect of economic and social changes on the home.
   A. The change in the home activities.
   B. The resulting extension of "woman's sphere."
   C. The modern home as a social force.
III. The responsibilities of women to-day.
   A. As citizens.
   B. As home-makers.
   C. As wage-earners.

With the passing of the years since woman first became recognized as an individual in the educational world, there have been many adjustments to meet her changing needs. In order that the reasons for these adjustments may be clearly understood, it may be well to survey briefly the development of woman's work in the home, the community, and the world at large.

**Women in colonial times.** — *Their life in home and community.* — The home of colonial times represented practically an independent unit in society. The girl participated with her mother and her grandmother in the household arts; and by coöperation with her father and brothers she received first-hand information in the industries which were carried on outside the walls of her colonial homestead. Alice Morse Earle, in *Home Life in Colonial Days*, quotes from a

paper published in the "American Museum" in 1787, the following statement of an old farmer:

> At this time my farm gave me and my whole family a good living on the produce of it, and left me one year with another one hundred and fifty silver dollars, for I never spent more than ten dollars a year, which was for salt, nails, and the like. Nothing to eat, drink, or wear was bought, as my farm provided all.[1]

Elsewhere in the same volume, we read:

> In recounting the various influences which assisted the Americans to success in the War for Independence, such as the courage and integrity of the American generals, the generosity of the American people, the skill of Americans in marksmanship, their powers of endurance, their acclimatization, their confidence and faith, etc., we must never forget to add their independence in their own homes of any outside help to give them every necessity of life. No farmer or his wife need fear any king when on every home farm was found food, drink, medicine, fuel, lighting, clothing, shelter. Home-made was an adjective that might be applied to nearly every article in the house.

The work of woman in colonial days consisted mainly in the transformation of the raw materials of food and clothing and other life necessities into usable form for her own household. The beginning of social service in woman's work was found in colonial neighborliness. Although each household was practically independent as far as the production of the raw materials of food, clothing, and shelter was concerned, nevertheless exchange of services among the various families of a community was a necessity.

In the days of our grandmothers, just as to-day in neighborhoods remote from sources of supply, there was much interchange of services among families. At times, in lieu of the doctor and the trained nurse, one or two men and women in the neighborhood gave freely of their time, strength, and knowledge based on experience, to those in the community who were in need. In place of the professional caterer in the serving of meals to large numbers of friends, the women of the community contributed their share to the success of the undertaking. Interchange of service throughout a neighborhood provided the service which to-day is done by trained specialists and paid for in currency. It is not strange that with the advent

[1] *Home Life in Colonial Days.* By Alice Morse Earle.

of the new social order there has passed much of the intimate friendship and sympathetic neighborliness which existed under the old order of things.

It is interesting to note that the home duties and recreations of the women in colonial times were very closely allied. A task of unusual proportions was made the occasion of a social gathering and a feast. The quilting bee, the husking bee, and the barn raising were instances of this happy means of eliminating drudgery. " Change-work " in soap making, the making of apple butter, the sewing of rags for carpet, made a social day for two or more women who working alone would have found the tasks irksome. Such interchange of spirit as well as of work caused pleasant anticipation rather than dread of the task to be accomplished.

Within the home, among its own members the preparation for feast days meant the expenditure of much labor; but when this was made the occasion of jubilant coöperation of all members of the family, the size of the undertaking dwindled; and well-filled larders were not accompanied by the extreme exhaustion of one or two members of a household.

The natural outcome of the internal industries in the home was the centralization of social life in the home. Father, mother, boy, and girl found, either in their own home or in the homes of the community, the recreation which they sought.

*The education of girls for womanhood.* — Although not dignified in those days by the name of education, woman's life in the home and the community in colonial times offered an ideal preparation for the life which lay before her. The joy and dignity of labor were certain by-products of the well-developed industries of the home. Skill in the processes involved in the household arts was taught by constant participation in the spinning, weaving, candle making, soap making, dyeing, canning, preserving, and other industries carried on in the colonial home.

In comparing the school training of to-day in industrial and household arts with the home training of colonial times, Dr. Luther H. Gulick thus defined the advantages of the latter in its character-building effect:

From two to four hours of laboratory work per week has taken the place of from six to twelve hours a day of real work with a real mother doing real work for real people in a real home. The result is that our children know more about the use of tools and the physics and chemistry of cooking and the art of serving than did our grandmothers. And we are only just beginning to realize that learning how to work has in no respect the character-effect of working, and that being taught is one thing, and working with, is another; and that knowing how, and having responsibility for, are all different in their effects upon life.[1]

It cannot be denied that the colonial kitchen with its great fireplace and the "hearth fire's ruddy glow," its high settles, its hanging crane, its shining pewter, the spinning wheel, the candle molds, made a very natural setting for the practical education of the girl; and that the highest ideals of home and family life would be nurtured in the lives of all members of the well-ordered household.

Her training in hospitality and community service came to the girl in colonial times through her home experience as already depicted. As the daughter grew to womanhood, she was initiated into the neighborly services in which her mother had gained skill by experience. Or perchance she was able to supplement her mother's efforts in her own home by learning how to do from some neighbor whose skill in that particular art surpassed her mother's.

The place of the church in the life of the colonial girl was such that it must be considered as one of the great factors in her education. The estimate of her religious training as part of her daily life may best be judged by a glimpse into the "Diary of Anna Green Winslow, a Boston School Girl of 1771" (aged 10 years), edited by Alice Morse Earle.

February 22, 1772

I have spun 30 knots of linning yarn, and (partly) new-footed a pair of stockings for Lucinda, read part of *Pilgrim's Progress*, coppied part of my text journal, play'd some, tucked a great deal (Aunt Deming says it is very true) laugh'd enough, and I tell Mamma it is all human *nature* if not human reason.

March 9, 1772

I think this day's work may be called a piece-meal, for in the first place I sew'd on the bosom of unkle's shirt, mended two pairs of gloves, mended for the wash two handkerchiefs (one cambric), sewed on half a border of a

[1] Address delivered before the National Education Association, July, 1912.

lawn apron of aunt's, read part of the XXIst chapter of Exodus, and a story in the "Mother's Gift." Now, Hon'd Mamma, I must tell you of something that happened to me today, that has not happened before this great while, viz., My unkle and aunt both told me, I was a very good girl.

Marian Talbot quotes[1] the foregoing selections with the following comments:

The little girl thought first of how she should be clothed; the subject second in importance was her soul's welfare — she was a very pious little person, a member of Old South Church. She was industrious and active in housewifery accomplishments, and was trained to take her place as part of the industrial system of which she would become a member, a system in which there was division of labor largely based on sex, because based on the family organization.

She was an accomplished as well as a "strangely industrious little piece of femininity." She learned "dancing, or danceing, I should say," and attended a writing school to acquire the most indispensable and most appreciated of eighteenth century accomplishments — fine penmanship.

She read much, the Bible constantly, and also a "variety of other composures." Her instincts and habits were friendly and social, and she spent much time in visiting brides, babies and old folks.

A view of her education would be incomplete if the training she received from listening to sermons or to the discussion about them should be ignored. Her Bible reading was full of significance to her.

Miss Talbot, in bearing out this last point, quotes from the same diary:

March 11, 1772

Boast not thyself of to-morrow; for thou knowest not what a day may bring forth. Thus King Solomon, inspired by the Holy Ghost cautions, Prov. XXVII, I. My aunt says this is a most necessary lesson to be learned and laid up in heart. I am quite of her mind. I have met with a disappointment today, and Aunt says, I may look for them every day. We live in a changing world in scripture call'd a vale of tears.

Miss Talbot's further comments concerning the education of Anna Green Winslow run as follows:

When she was twelve she was regarded as "finished," and "came out," being invited to a succession of prim little routs, or parties, which she called "constitutions."

If the results of her training be summed up, she is found to be an excellently educated little person, ready to take her place in the family, which, as has been said, constituted the industrial organism of the day;

[1] *The Education of Women.*

prepared for social life by her reading, writing, dancing, and the ease of manner which comes from constant intercourse with gentle people in human experiences. When to these is added the preparation which she had received for participation in church life, a life covering activities now known as religious and philanthropic, it is evident that she was indeed well educated, lacking development only on the æsthetic side — the latest to be emphasized in any community — and the political, of which she does not speak.

**The effect of economic and social changes upon the home.** — A parallel survey of the home of colonial days and the home of the twentieth century reveals very striking differences; and woman as the member of the household most intimately related to the processes of the home has naturally been called upon to make extensive adjustments of her interests and her activities.

*The change in home activities.* — The modern home no longer houses all the essential industries which support life. In the ultra-modern household practically none of the industries exist. The apartment hotel, perhaps, best represents this extreme type. If not furnished by the owner, the suite of rooms which is the home of the family living in it has, perchance, been furnished by an interior decorating firm. The family dines in the hotel dining-room. Light and heat are provided by the pressing of a button and the turn of a valve. The rooms are cared for by the management. The wearing apparel of the members of the family is either purchased at the shops or made by specialists.

The average home to-day is less extreme in its modernism. Certain industries remain; the individual kitchen and dining-room, with the elements of their attendant industries, survive in spite of the occasional effort toward communal kitchens which will deliver cooked food on order to the individual dining-room. To be sure, the food industries as pursued in the home have been greatly curtailed by the commercial food industries. We find upon our pantry shelves to-day many foods either ready or partly ready to serve which in years past were developed from their raw state to edible form by the housewife. A point of constant discussion among housekeepers to-day is the feasibility of the retention in the home of such processes as canning and preserving, baking, garment-making, millinery; and with the facilities of the modern

industrial system and the demands of society upon the time and strength of women there is much to be said in favor of her release from these duties in the interest of larger service.

The great world war with its attendant need for food has revived the demand for more individual production. This has resulted in the revival of home canning and preserving, and in the more careful supervision of legitimate consumption of all commodities in the home.

The clothing and house furnishing industries have perhaps been most nearly removed from the home. Although in many modern homes some of the clothing of the family is still made at home, and the hangings and table linen are fashioned by the housewife to meet her specific needs, the starting point for her share in the industry is far in advance of her grandmother's; for the fabrics come to her in finished form, while her grandmother spun the flax, the cotton, and the wool, and wove them into cloth before she was provided with the fabric from which to fashion the clothing for her family and the furnishings for her home.

The growing dependence of the home upon organized industry has been paralleled by the increasing introduction of skilled service into the home. The baby specialist safeguards the health of the infant; trained baby nurses minister to its daily needs. There is a strong tendency toward the specialization of all forms of service necessary to the maintenance of the household. There exist to-day, upon a strictly professional basis, such occupations as that of catering, fine laundering, household managing and consulting, fine mending and repairing, home decorating and furnishing, menu planning from the standpoint of health and economics, social secretary service, dressmaking, millinery, manicuring and hair dressing.

Is it to be marveled at that with the reduction of woman's responsibilities and services as required by the home she has risen up in her strength and demanded an enlarged sphere for her powers?

*The resulting extension of "woman's sphere."* — The removal of these industries and other activities from the home has caused the extension of woman's vision. Whereas, in colonial days, her

family's needs were supplied largely by the efforts of the combined labors of the members of the household, to-day they are met by the united efforts of an untold army of workmen whose labors are paid for in currency. Production in the household has been superseded by consumption, although production still holds a place. Woman's share in the business of home-making has become, in large part, the wise saving and spending of the family income. In many cases she has a part, if not an equal share, in the earnings of that income.

As a result of her increased interest in economics, woman is widening her horizon in relation to social conditions. Although possibly a selfish interest at first, it rapidly develops into an altruistic one.

The health of her family is dependent upon the cleanliness of the milk supply. For the city woman a study of the conditions under which the milk which she buys is produced and distributed develops naturally into an interest in the condition of the men and women who labor in the industry; while the woman who participates in the dairying industry will naturally extend her interest to the consumers of the milk, and through her influence will be able to increase the sum total of physical health and strength.

Woman strives toward immunity for her family from disease which may develop from contact with unsanitary garments. An investigation into factory conditions and sweatshop labor in order to safeguard the health of her family will result in a sense of responsibility for the welfare of the men and women employed in the garment trades.

The dependence of her own family upon community sanitation in relation to drainage, insect pests, ventilation, etc., will lead into a consciousness of her share in the maintenance of good housing and civic conditions for the "other half." Pure food and clean markets for her own family will result in improved conditions for other individuals whose knowledge is less than her own. An interest in the best of life and health for her own children will, with increasing insight, lead into the will to improve conditions for all children by the enforcement of the Child Labor Laws.

Dr. Luther H. Gulick in an address before the National Education Association thus expresses the enlarged vision of women:

Woman's work has largely been taken into the community and out of the individual home. Woman is, therefore, following her work into the community. She is taking on the same kind of responsibility in the community which she has always carried in the home. Many of the psychic functions of motherhood she is discharging in the school. She is making playgrounds for children, healthier conditions in schools, fairer conditions for the work of men, women and children in farm, store, factory, shop and mine. The ideal is that of universal motherhood — all the women being responsible that every child is loved, cared for and given a fair chance. She is beginning to see that she is responsible for much of the municipal housekeeping, the conditions in the bakeshops and grocery stores. She is concerned that food shall be pure and water clean.

Dr. Frederick Henry Sykes says:[1]

As the city grew up around us, the well went in favor of the city water works; the coal-oil lamp was replaced by gas, by electricity; no more firewood for the small boy to saw and split, we put in a gas stove; the washtub passed out to a commercial laundry; the slop-bucket was turned to a city sewerage system; the family cow faded away to a ghostly morning milk bottle; horse and buggy changed to a street car, to a trolley, and the automobile; our few books became a Carnegie library; the seashells on the what-not went over to the American Museum of Natural History; the wax flowers, the crayon portraits of our ancestors, to the Metropolitan Museum of Fine Arts; the front yard went, perhaps, into Central Park and public playgrounds; of the backyard there was nothing left but a fire escape; the woodshed shrank to a gas meter; the cellar, to an ice-box; the open fire, to a radiator. The old poet bade us die for hearth and for home; but not even the poet of *vers libre* can inspire any enthusiasm for mortality on behalf of a radiator and a flat.

. . . . . .

Have you noted how many of the activities of trained women to-day are in the old fields of woman's endeavor, only the scope has been broadened, socialized, and the work specialized? Our mothers were our first nurses, our first teachers, book providers, housekeepers, charity-workers. The new occupations are only the old ones writ large. Our army of trained nurses, our woman doctors, our host of public-school teachers, our women librarians, dietitians, health and factory inspectors, architects, costume designers, settlement workers — what are they but our grandmothers, if I may borrow a phrase from the trenches, not at peace but in pieces?

Women must still make the individual home; we must count on them also to make the larger home, to civilize the city. To meet our new social needs, women must develop — alert and trained in heart, brain, hand, —

[1] *The Social Basis of the New Education of Women.*

trained technically, trained socially, trained politically. What society needs is not the stored mind of the student merely, but the dynamic personality, uniting character, culture, vocational fitness, informed in social science, and touched by the spirit of service, of the church militant here on earth. Some women, I don't wonder, shrink at the task ahead, but some women welcome the new responsibilities, opportunities, training, and theirs is the leadership of the future.

Is it to be marveled at that woman with her instinctive vision for the extension of her field of usefulness has risen in her enthusiasm and demanded the privilege of sharing in the enactment of laws which control the welfare of this "larger home"?

*The modern home as a social force.* — The slogan chosen by the Y. M. C. A. for its $35,000,000 drive in the fall of 1917, to be devoted to the welfare of the soldiers and sailors in war service, was evidence of frank appreciation of the social force of the modern home. "Keep the Home Fires Burning" was an acknowledgment to the world that no force would have greater power in promoting the highest ideals of health and honor among the men of our country than the maintenance so far as possible of the social, moral, and spiritual conditions existing in the best type of American home.

The oversubscription which resulted in a fund exceeding $50,000,000 gave testimony to the faith of the American people in the standard which had been set as the purpose of the drive.

Therefore, the place of the home in the maintenance of the efficiency of the members of the household cannot be overstressed; and for the woman in the home as partner with her husband in the business of home-making in its greatest significance there exists the grave task of making every member of the household the greatest possible asset to the nation and the world.

Although inseparable, there may be named three phases of social fitness toward which the home should contribute: (1) physical health; (2) intellectual attainment; (3) spiritual poise.

The world war has drawn to an unusual extent upon all these qualities in the lives of men, women, and children; but is it not safe to say that had there been a saner balance among men in these three phases the conflict might have been avoided; and that with

the long period of reconstruction which follows, the demand for wise judgment and skilled ability will be met in proportion to the capital of each which is given to the individual?

**The responsibilities of women to-day.** — *As citizens.* — The hour has already struck for women in certain parts of our country to assume their share of the responsibilities of citizenship, and universal suffrage seems certain. Woman faces her new task with limited knowledge and experience in the affairs of state. Her influence heretofore has been indirect. The more progressive woman has kept in touch with modern affairs, but the details of accomplishing results have not been hers to master. A new problem, then, in woman's life is the wise use of the vote, in the fulfillment of her privileges and responsibilities as a citizen.

Her grasp of the home and its relation to the community, her sense of its importance as a social force, and her consciousness of her share in the extension of the best in home influence should serve as a spur to the conscientious exercise of her new-gained power.

It is difficult to differentiate between the affairs of government that are and those that are not related to " woman's sphere " in its modern scope; for the home as a setting for every individual and the interrelation of home and government have broken down any barriers which may have existed in earlier years. Suffice it to say that woman must meet her new field of service with the highest degree of intelligence which it is within her power to command; and that she is fortunate in having as a basis for that intelligence an inheritance of human interest and a desire to serve which is to have a greater, even if it must be a less intimate, field of usefulness than that of the woman in colonial days.

Luther H. Gulick thus defines woman's share in the affairs of government:

> Woman is as sure to have the suffrage as the tide is to rise, not because she is as wise, as strong, as skillful as man is, nor because she, like him, is a human being, nor for any other reason of likeness or duplication at all, but because she is different, because the world needs her peculiar and special abilities. It is because she is different, because these differences are fundamental world needs, that it is necessary that she shall bring these differences to the service of the world. This fact, whether woman wants

it or no, the suffrage will force inevitably upon her. Woman has been responsible for the home — so she had her voice. Now she has thrust upon her a new, terrible and glorious responsibility and opportunity for the home and social aspects of the community. We insist that she must speak, but because she is different and not because she is like. The vote is no end in itself. To serve the community in ways in which she is the creator and specialist is the end, and toward this service the women of the civilized world are pressing, most of them unconsciously — a few of them consciously, but all of them inevitably.

*As home-makers.* — As custodian of the health of the members of her household, and, directly or indirectly, of their intellectual and spiritual poise, the home-maker's modern task assumes stupendous proportions. She dare not depend upon her time-honored instinct in matters of selection, preparation and care of food, clothing and shelter.

One great responsibility of the modern home-maker rests in the intelligent expenditure of her own time and energy. A consideration of this important phase of her duties will inevitably result in a careful evaluation of her daily routine. Loyalty to home and family has long since ceased to mean complete submersion in the affairs of the home. The modern home-maker realizes an intellectual as well as a physical loyalty; she must be able to inspire and to stimulate to higher thought and achievement, as well as to keep the family well and happy. She will experience a larger life and achieve a greater service to her family and the country's cause if she strives toward a realization of the standard set by Mr. Herbert Hoover during the world war.

Go back to the *simple* life, be contented with *simple* food, *simple* pleasures, *simple* clothes. Work hard, pray hard, play hard. Work, eat, recreate and sleep. Do all courageously. *We have a victory to win.*

The consumption of time in long processes of cooking and sewing, which may be shortened without physical loss and with intellectual and spiritual gain for herself and her family, indicates a weak basis for the evaluation of essentials. The intelligent and unselfish utilization of their time thus released demands thought and purpose on the part of women.

A present-day advertisement of negative influence thus incites

the housewife to the use of a cleansing powder in the dish-washing process: "My dishes are done in half the time, and I am off to the movies!" The wise combination of recreation and purposeful toil in the expenditure of her leisure time, which is the result of her readjustment to social and economic conditions, is one of woman's present-day problems. Through education alone can womankind come to a full sense of her importance as a citizen. "The deepest need of woman is her need of being needed"; and not until she senses the need as a world-cry will she appreciate her value to the world.

To what extent the woman of to-day may wisely divide her time and strength between the individual and the larger home, she alone can decide. Educational agencies should present the case clearly to her in order that she may have a basis for her decision.

Miss Laura Drake Gill in "A Creed of Work for Women" has formulated a working principle for the reconciliation of the home and wage-earning occupations under present-day conditions:

## A CREED OF WORK FOR WOMEN

I BELIEVE that every woman needs a skilled occupation developed to the degree of possible self-support.

She needs it commercially, for an insurance against reverses.

She needs it socially, for a comprehending sympathy with the world's workers.

She needs it intellectually, for a constructive habit of mind which makes knowledge usable.

She needs it ethically, for a courageous willingness to do her share of the world's work.

She needs it æsthetically, for an understanding of harmony relationships as determining factors in conduct and work.

I BELIEVE that every young woman should practice this skilled occupation, up to the time of her marriage, for gainful ends with deliberate intent to acquire therefrom the widest possible professional and financial experience.

I BELIEVE that every woman should expect marriage to interrupt for some years the pursuit of any regular gainful occupation; that she should prearrange with her husband some equitable division of the family income such as will insure a genuine partnership, rather than a position of dependence (on either side); and that she should focus her chief thought during the early youth of her children upon the science and art of wise family life.

I BELIEVE that every woman should hope to return, in the second leisure of middle age, to some of her early skilled occupation, — either as an unsalaried worker in some one of its social phases, or, if income be an object, as a salaried worker in a phase of it requiring maturity and social experience.

I BELIEVE that this general policy of economic service for American women would yield generous by-products of intelligence, responsibility and contentment.

*As wage-earners.* — Woman as wage-earner has entered most of the occupations which are scheduled in the census reports. The present conditions have thrown open the door of opportunity to woman to enter many fields of service as wage-earner wherein she may, if she is educated for it, exert her influence for the improvement of conditions, both economic and social.

It seems to have been women's part in civilization to devote their time and strength and money to the alleviation of suffering. This has been true, perhaps, because they are "different"; they have as a distinguishing feature of their make-up the intuitive faculty of discerning suffering and of wishing to reduce it. In earlier times, women's resources were largely those of the family bank account; and woman's ability to persuade her husband of the importance of a particular "charity" was in many cases the measure of her devotion to the cause.

As time went on, the old idea of almsgiving in an indiscriminate way gave way to a more systematic method of relief, and various kinds of relief associations, such as charity organizations and settlement houses, have resulted which have proved more effective in the permanent alleviation of distress.

Women have shown great initiative in promoting the constructive method of reducing misery and dependence. Peculiarly significant in this regard is the New York Orphanage at Hastings-on-Hudson, which ever since its inception has been managed by a board of woman governors.

The responsibility of the woman who earns is in many cases an especially important one. If, as often happens, she is home-maker as well as wage-earner, she is called upon to administer her time, strength, and money in both capacities in the most effective way.

In order to be of greatest economic and social value to her

country, she must be well prepared to perform her duties in her home as well as in her chosen occupation. Her dual activities tend to force upon the home the simple methods of housekeeping. The art of modern home-making involves the responsibility of evaluating each article of furnishing, each household process, each delicacy and comfort, each article of dress in terms of the balance between the satisfaction resulting from it and the additional labor it entails.

Her contact with world conditions fits her to judge wisely of world needs; and the demands upon her judgment and advice will increase directly as she assumes her share in the direction of the "larger home." The wise expenditure and investment of her income demands thought and wisdom. Be it large or small, that money above and beyond her needs for the most sensible standard of living must be wisely spent. A knowledge of world needs will regulate her subscriptions to the call for funds; a keen business sense will be necessary in wise investment.

The woman who earns has, in common with all mankind, the social responsibility of health. She must regulate her expenditure of energy according to her capital. In order to keep her capital intact, and to add to it, she must know:

1. *How to select food* which will yield the best returns in energy and tissue building.

2. *How to dress* so that she will be able to conserve the heat yielded by her food intake; so that she will convey to her associates and coworkers a conviction of her strong womanly qualities; and so that she will have the right influence upon the production of textile fabrics and the welfare of garment workers.

3. *How to live* so that she may keep in touch with the world's progress, in order that she may exert her influence toward that progress; and so that she may continue to grow socially, intellectually, and spiritually.

The question may arise, "But why have these needs been especially stressed in relation to the woman who earns?" No claim has been made that she *alone* needs special training for this responsibility; but for the woman as home-maker the world to-day be-

lieves in specific training which contributes to both womanhood and home-making, while in the case of the woman in wage-earning occupations, there are extremists who profess to believe that such training is not essential, unless the occupation is one which has developed from an interest in the household arts.

In concluding his article "The Social Basis of the New Education of Women," Dr. Sykes says:

> I don't know what the end of life is — what it all means, what we are all after, working for. It seems that what life wants is more life, "to live more abundantly." There is promise of it.
>
> . . . . . .
>
> Let us build on, hopeful of the future, for social justice, for social intelligence, for social facilities, for a democracy realized in happy, busy, beneficent, effective human beings (as Ruskin describes the truly educated) that are the real wealth of nations. That is the social gospel of the new education for women.

Womankind cannot be expected to achieve immediately her highest ambitions and ideals; but to women of the twentieth century has come the unlimited opportunity to try to scale the heights which stretch before her. With the widening of her vision there will be developed many qualities in her character which have lain dormant because of disuse; and those outstanding characteristics which are hers by inheritance and make her "different" will be turned to the best account under the new conception of "woman's sphere."

## SUGGESTIONS FOR STUDY AND REVIEW

1. List the home and community activities of a modern home-maker in your community. Which of these do you consider worthy of special thought and study on the part of the woman?

2. Compare the different types of civic responsibility of the woman in the farm home and of the woman in the city and village home.

3. Cite women of history and of the present day who seem to you to have responded to the social demands of their time.

4. Evaluate the various purchases made during the past two years in the furnishing of your home "in terms of the balance between the satisfaction resulting from it and the additional labor it entails."

5. What are the "differences" in woman's make-up which should contribute to the betterment of the "larger home"?

6. Describe the actual life of some woman of your acquaintance who seems to you to have realized the ideals set forth in Miss Gill's "Creed of Work for Women." What do you consider the essential factors in the creed from the standpoint of the title of this chapter?

## REFERENCES FOR COLLATERAL READING

The Education of Women. Talbot.

The Social Basis of the New Education for Women. Sykes. Teachers College Record, May, 1917.

The Economic Function of Woman. Devine. Bureau of Publications, Teachers College, Columbia University.

The Business of Being a Woman. Tarbell.

Sociology and Modern Social Problems. Ellwood.

## CHAPTER II

## THE RESPONSE OF EDUCATIONAL AGENCIES TO THE NEEDS OF WOMEN

I. Introduction.
II. The response through elementary and secondary schools.
  A. Early attitudes toward the education of girls.
  B. Modern ideals and present tendencies.
III. The response through higher institutions of learning.
IV. Other educational agencies.

**Introduction.** — We are coming to appreciate the very large and important part that women are taking in all lines of necessary work, and we can but applaud the splendid way in which they are meeting the demands of society. The attitude of society toward women and their work has changed even as the home of former days has changed. Women can no longer confine their interests and efforts to their own homes, not only because they cannot give fullest self-expression to themselves there, but because society has need for them elsewhere as well. It is a recognized social good for women to widen their interests, to increase their powers of leadership in all kinds of social welfare, and to engage in the production of the world's material needs. In view of this fact there is a growing disposition to permit women to qualify for any position they may choose to fill and to help them to adjust themselves to the new régime in the social and industrial world. To many women this changed social order means an opportunity for self-expression never before realized; to others it may mean a bondage in the industrial world that strains to the breaking point.

To satisfy both of these classes old social institutions have had to search themselves to determine whether or not they were meeting modern needs, and in many of them there has resulted a change of

ideas and ideals expressed in the new types of work they have undertaken.

The changed home indeed! But it were just as well to add, the changed school, the changed church, the changed industrial world, and the changed attitude toward women. The past form of the word would better give way to the present participle *changing*, for the process continues, and it is our strongest hope, that, profiting by the experiences of the past, the generations to come will work out a social order exemplifying the best that is in us and in them, and that women will be more able than ever before to make their full contribution.

One does not need long vision to see that women occupy "a strategic position" to-day. The war opened up opportunities and disclosed abilities that were before undreamed of, and never again can charges of inferiority due to sex be made. Individual differences there may be, but women have been found to have strong personalities, vigorous minds, and physical endurance of surprising quality which have made it possible for them to help to originate as well as to actually carry on the world's work in this great hour of need.

**The response through the elementary and secondary schools.** — When we contrast the positions held by women of to-day with those held by women of the past we wonder what factors have been most responsible for qualifying them for their places. What agencies have been at work making it possible for women to engage in the professional, commercial, and industrial world and to originate and administer new lines of work when opportunity offers? The removal of industry from the home may be one of the primal causes for all social change, but to education must be given the honor for the advancement made by women during the past half century.

*Early attitudes toward the education of girls.* — We are first of all indebted to the establishment of free elementary and secondary schools in our country. At first there was a decidedly illiberal attitude shown towards girls' education. During the early colonial times the public felt no responsibility for the education

of its girls. In fact we read that in 1788 a New England town voted *against* using any of its funds for this purpose. The home and the dame school were the recognized educational agencies, and girls received all necessary education in one or the other or both. Intellectual pursuits were not considered essential; religious and industrial training took first place, and those were cared for in the home. The dame schools in the early eighteenth century attended by the few offered major instruction in the three R's and added music, dancing, and sewing. This was considered quite sufficient for social elegance. What mattered it if a woman could only affix her mark to a legal document!

Later, girls were given a little larger opportunity. In some cities and towns where there were not enough boys to fill the schools, girls were given the privilege of attending. In some instances they had the use of the buildings when not needed by the boys, possibly an hour during the day when the boys were otherwise engaged. During the summer months, when the boys had their vacations, the girls were given instruction, but it was meager and inadequate. In the more sparsely populated sections the girls were more fortunate. They were admitted to both elementary and secondary schools and shared alike with the boys, for their enrollment was necessary to secure the full quota of pupils to establish the schools.

The year 1825 marks a humorous incident in the progress of education for girls. The city council of Boston voted $2000 to establish a girls' high school. Before the end of the second year the school had become so popular and the applications for admission so numerous that the school committee, not seeing its way clear to finance the demands for more adequate accommodations, abolished the school as a failure! Even though to Boston is given the credit for being the pioneer in establishing secondary education, not until 1852 did she make provision for public secondary education for girls.

For a long time throughout the country there was a disinclination to give the same quality of instruction to girls as that given to boys, but as the function of the high school became more wisely defined and the need for women with higher education increased, this

attitude changed, and to-day we find differences in kind only, where those differences may be sought by the individual.

*Modern ideals and present tendencies.* — Society no longer questions the advisability of providing free educational facilities for girls and women. Its greatest concern now is that the schools of the country shall meet the needs of the present, and to this end we find our schools like all other institutions undergoing change. A progressive society demands a progressive educational program.

When we realize that only about one per cent of the entire school population enters college and only about five per cent enters high school, we feel at once like turning to the elementary school to find the reason. We are so used to thinking of the elementary and secondary schools as educating our children that we credit them with success or failure in their results, forgetting the part played by higher institutions in establishing policies, forming ideals, and training school men and women for their positions. Elementary school practice cannot rise higher than educational ideals, and these are formed in institutions higher up.

1. Education an important subject of study. — During the past twenty-five years a new interest in education has developed. Always a profound subject of study, it has been given new importance, and just at present nothing is more important than that our educational platform be sound, for the period of reconstruction needs the strongest men and women it is possible for our schools to produce.

As a subject of study education has a recognized place in the university. This makes it possible to study the educational needs of the present. Trained men and women can study the signs of the times in the light of the history of the past with the help of all the arts and sciences that a university can provide. Departments of sociology, psychology, and philosophy are giving some of their best talent to the working out of educational problems, and a science of education is developing.

The educational sociologist is studying the needs of society and is formulating principles which will aid in determining what shall

be taught; the psychologist is studying the individual and is formulating principles underlying our method of class procedure; the educational philosopher determines the *why* of our efforts and guides us in our educational endeavor. The need of the three, the psychologist, the sociologist, and the philosopher, is apparent. *What* one teaches depends so much upon *why* he teaches it that wise discrimination in choice of subject matter can only follow the line of one's philosophy of education. *How* one teaches is also so dependent upon the quality of mental and physical habits desired that it is essential to know not only educational psychology but educational philosophy as well, so that our boys and girls will not only be educated but will be educated in the right way for the right kind of social organization.

There are still many in the teaching profession whose zeal for the *subjects* they are teaching makes them unconscious of the fact that after all they should be teaching *boys* and *girls*. More and more the demand comes for professionally trained men and women, and when this demand is strong enough the interests, capacities, and needs of children will take precedence over subject matter and traditions of the past.

2. Changes in the educational program. — As a result of the study of the educational situation we find our educational structure changing. Philosophers would seem to have prophetic vision and patience to work for the accomplishment of that vision, else how could Dewey and others who have worked along similar lines for years, have waited until now to have these ideas universally accepted? We find our educational program built upon the principles they established, undergoing change, slow but sure at present, with every indication that the present crisis will bring more rapid and radical changes. Of just what nature they will be it is difficult to forecast, but we may be assured that the schools of to-day will not be adequate to the needs of to-morrow, and those of us who are responsible must keep our ears to the ground and be quick to make the adjustments demanded by the new social régime. We have faith to plan for an education suited to a democratic society. Our aim still will be to train for a democratic citizenry, but the two

words *democracy* and *citizenship* are so much more meaningful than ever before that our effort will likewise take on a new vitality.

We are encouraged from all sides to modify the present program. The educational philosopher is helping us to establish our ideals; the sociologist is questioning the validity and worth-whileness of our subject matter and is helping us to change our curriculums; the psychologist is questioning our method and is giving constructive suggestions as to how to proceed; the general public stands on the side lines applauding or decrying our results, and even the pupils themselves are clamoring for a voice in school affairs, all of which makes the teacher, the principal, and the superintendent conscious that there is great need for weighing and evaluating all theories and opinions and for putting their reconstructed conceptions into practice.

Already new purposes are being felt; new methods are being tried out; elimination and enrichment are commonly used terms in connection with courses of study; economy of time in learning is being studied; schools are being reorganized; the needs of the individual and of society are being analyzed; and all together there is a seriousness of purpose on the part of educators never before known.

3. New purposes in education. — In deciding what it shall aim to do for its pupils the school is no longer free to focus its attention upon itself, but has instead to determine its relation to the outside world and to appreciate that the pupils within its walls are there to have those experiences which will fit them for life outside the school. Real preparation for life implies participation in it, and until the child is given an opportunity to share responsibility, to perform service for others, to assume worth-while duties, and to realize satisfaction as a result of doing these during the hours he spends at school, it cannot be taken for granted he will have the necessary preparation for life.

To make it possible for the child to experience life, or to participate in life's activities, becomes one of the most important purposes of the school. The modern kindergarten, the modern elementary

school, the modern secondary school, and all institutions which have a claim on modern educational ideals make use of the principle that the work of the school should prepare for life outside of school, and of the principle that we "learn to do by doing." We are getting away from the idea that the first eight years of one's school life should be spent only in acquiring the tools of learning, and are substituting in its place the idea that these tools may be acquired through the effort made to solve some of the real problems of life. The purpose of the school has been enlarged beyond that of simply acquiring the use of tools and acquiring subject matter against a time of future need; educators are realizing that boys and girls must live in the world as social human beings and that their ability to do so later depends upon the opportunity to do so now.

More and more the school is realizing that it must take over some of the functions formerly performed by the home, not because the home is not willing to do what it once did but because the changed conditions make it impossible for the home to assume the full responsibility.

The health of the child once guarded by the mother has become a consideration of the school. Society appreciates that health is a national asset and that people must have strong bodies as well as strong minds, consequently the school is asked to share with the home the responsibility of maintaining and promoting the health of its pupils. The school nurse, the school doctor, the surgical clinic, the dental clinic, the medical clinic, medical inspection, open air schools, the school lunch, public health education, and, best of all, play and playgrounds, all bear evidence that the school is an essential agency through which health and health education must be provided.

Another function that the school shares with the home is caring for the moral welfare of the child. Since education is based upon the principle that moral training accompanies conduct, the school has become conscious that it must stimulate such habits of thought and action as are acceptable to society. It feels responsible for producing in the child such traits of character as are desired in the

citizen. Through an understanding of the laws of habit and an application of these laws right habits of life may be formed in school.

Still another serious purpose of the school is to educate its pupils to appreciate the industrial world in which we live and also to fit boys and girls for such work as they may have to engage in on leaving school. In the interests of democracy it would seem necessary that all members of the group should be able to engage in some kind of productive work, not only for its own sake but for the sake of valuing the work of others. Before the passing of industries from the home, the school and the home shared more evenly in the responsibility for the industrial education of the child. Boy and girl worked side by side with father and mother in the processes involved in making many of life's necessities, and not only learned how to do the needful things but felt a sympathy with those engaged in similar occupations.

Lest experience in handling materials and a knowledge of modern industrial processes be lost, the modern school, through courses in industrial arts in the elementary school, gives a knowledge of present-day industry, and through the vocational classes and schools prepares pupils for such occupations as they may wish to follow. Vocational education has been a serious subject of study for more than ten years and at present is receiving an unusually large share of attention. The passage of the Smith-Hughes Act is but one evidence of the great interest in vocational education in the United States.

In our modern school education for leisure is given no secondary place. One of the greatest needs of our changing social life is an equipment for spending leisure time more wisely. The work program demands a play program. Machinery has shortened the hours of labor for many; for others the intensity of labor demands increased leisure. Every one has some time away from work that can be spent in enriching life or that can be used in such a way as to lower the vitality and the morals. Must not our schools give more than a passing thought to this problem?

In the effort to qualify for an occupation and with the utilitarian

idea ever before us may there not be a tendency to overlook the value of some of those subjects that contribute most to the enjoyment of life? Music, art, literature, and other subjects not contributing directly to the performance of the day's work, become very utilitarian for the leisure hours. The ability to play, to create, to express one's self in some way should be discovered and developed in the school, and in the modern school we find emphasis given to this phase of living. For no other group does the wise expenditure of leisure need so strong emphasis as for girls and women.

4. New methods of teaching. — It is only natural that the changed purposes of the school be accompanied by changed methods of instruction and that the subject matter, or at least its arrangement, be changed to meet our new ideals. The modern school no longer thinks in terms of discipline and subject matter, but rather in terms of developing the child's resources and fitting him for his place in a democratic society; and with this thought in mind it becomes the business of the school to provide means whereby the child may not only grow but grow up with such powers of mind and body as our society needs.

The spirit of democracy is expressing itself in our modern schoolrooms, and in its presence we have come to feel that our methods of procedure have been autocratic rather than democratic. Teachers have made demands upon little children and have insisted upon results quite out of harmony with the laws of child nature and the laws of learning. The same demands have been made of all children regardless of native interests, capacities, and tendencies; the same means have been used to get results. With the old ideas of discipline and acquisition of subject matter prevailing, these methods may have sufficed, but since the social efficiency aim guides our work, modern method seeks to understand the individual child and to develop within him, according to the laws of learning, those characteristics that society desires in its members. The school really offers an apprenticeship in citizenship by giving opportunity for practicing those virtues desired in the citizen. Instead of imposing tasks the teacher directs the pupils in the choice of those activities that interest him and are suited to his needs and

capacities, and as a result the pupil finds joy in school work. Having in mind rather clearly what habits are desired in the child, the teacher can provide opportunities for the repetition of such acts and thoughts as make for strong moral fiber.

If coöperation is necessary in a democracy, the school should provide repeated opportunities for children to work together on some worthy project; if initiative and ability to organize are essential, children must be encouraged to suggest lines of activity and to work out problems which they have undertaken. In a live school *learning* and *saying* lessons have given way to *stating* and *working out* live problems. The teacher has become a director of activities while the children are learning through doing.

The schoolroom has become a little community, the members of which instead of being controlled from without are learning self-control; instead of having tasks assigned, they are choosing those tasks they feel must be done. They are learning to choose and to do, to form judgments and weigh values, in short they are practicing citizenship and are feeling their worth as members of a group. As one teacher expresses it, "Our mission is not scholarship but service, not books but boys, not culture but citizens. . . . We are in the business of helping boys to grow to men, all able and disposed to advance the general good."

5. Changed curriculums. — The new purposes in education are likewise reflected in the new curriculums of our modern schools. Curriculums, like methods, have been handed down to us from the past, and it is only with the greatest difficulty that any of the traditional subject matter can be discarded or rearranged. But our progressive society demands that as the dominant interests of society change and as the needs of those who leave our schools change, the curriculums also must change. The answer to, What is most worth while, is continually being sought, and just how to reconcile the needs of the adult in the workaday world into which the child shall pass on leaving school, and the immediate needs and interests of childhood is the problem ever before those responsible for making courses of study. Patrons as well as teachers find difficulty in accepting anything new and often demand a continuation of the

traditional school subjects. However, the up-to-date school has incorporated many new ideas and has rearranged the old so that the child may use them. The old subjects have been revitalized and new subjects have been added. There is time set apart for industrial arts, giving the pupils opportunity for active occupation and acquainting them with the industrial world in which they live; and for nature study and elementary science, opening up such abundant opportunity for a closer acquaintance with natural phenomena. There is time for music and art and play; shops and laboratories are in use; connections are made between the school and the home and the neighborhood, all without any loss of subject matter at one time considered so important. The modern curriculum attempts to meet the child's present needs and recognizes that those needs differ from those of the children of yesterday.

**The response through higher institutions of learning.** — *Coeducation a factor in woman's progress.* — One of the greatest goods to come out of free elementary and secondary education and one that in itself has been such a strong factor in promoting the higher education of women is the opening of college and university doors to women. At present the principle of giving equal opportunity to both sexes at public expense extends from the kindergarten through the university. Society's need for women with higher education began to be felt during the civil war period, when it became necessary to call women in great numbers to the teaching profession. It naturally followed that if women were to instruct in the secondary as well as in the elementary schools further preparation than that given in the high school was essential. The western states were largely responsible for establishing coeducational opportunities.

Experience in coeducation has disproved any false notion that may have been held regarding the intellectual ability of women and has been instrumental in opening the doors of graduate and professional schools to them. They may take their professional training in the same classrooms and laboratories with men, and as they continue to fill the demand for professional service we can

look for a continued increase in the enrollment of women in these schools.

**Other educational agencies.** — *Extension teaching.* — After all, formal educational institutions reach only a limited number of individuals and those for only a limited time. The responsibility of society in helping women to meet life does not end with the school days of the girl. The after school years, the vacation periods and the leisure time of the girl at work are no small considerations of those responsible for girlhood. Her social needs and her educational needs increase as the school doors close, for life becomes more abundant after the formal period of education closes and the real need for help in meeting life's problems is by many felt only after commencement day is over. Those responsible for public education are meeting this situation by offering instruction in part-time classes and in evening schools. Instruction of varied types may be had for the asking. Go into classrooms and technical laboratories any evening in any large city to prove the need for instruction after school days are over. Girls and women in large numbers are availing themselves of the opportunities to learn those things life is demanding they should know. The type of work is not limited to the solution of industrial problems only; the earning of more money is not the only consideration of those in attendance. But rather there are problems of social and civic concern, there are moral and ethical values to determine, and the æsthetic nature to satisfy. One has but to read the subjects of lectures supported by the Board of Education of New York City to appreciate the variety of interests and needs felt by groups of persons in a metropolitan population; and similar interests are found in smaller communities.

Colleges and universities through their extension classes scheduled at convenient hours make it possible for many to avail themselves of further opportunity for study.

Great effort is being made to reach all groups of women and to meet all types of needs. Women in the most remote rural sections may share the advantages of those living in more congested ones. Through the Federal Government the educational, social, eco-

nomic, and domestic needs of farm women are being met, and the isolation of rural life is no longer a barrier to the complete living of women on the farm. The best that the school and the university have to offer may be had for the asking and may be taken directly to the homes of the farmer and his wife as well as to those who live in urban communities.

Paralleling the work of the school and university but operating in ways of their own, other organizations are making rich contributions to the needs of the girls and women of to-day.

*The church.* — The modern church has become socialized and is recognizing its worth as an educational agency in the lives of the members of the community. With its club rooms, library, gymnasium, kindergarten, after-school and Saturday classes, vacation camps, and various other organizations, it is possible for persons of all ages to choose such phases of activity as may enrich their lives. The social intercourse, the working together for common ends, make for a feeling of community interest absolutely essential to the working out of the ideals of the present. The talking over of common problems cannot but react upon the lives and homes of the group and gives an opportunity for putting into action those principles for which the church has always stood.

*The Young Women's Christian Association.* — One has but to study the organization of a large city association to appreciate the response that the Y. W. C. A. has made to the educational needs of women. The educational director of an association holds an important position and has many complex problems due to the variety of interests of those who may register in classes. The history of the educational work of the Y. W. C. A. is interesting. It dates back to 1866, when singing was taught in the Boston association. Astronomy and physiology were added in 1867, penmanship and bookkeeping in 1868, botany in 1869, history in 1874, calisthenics in 1877. Telegraphy was taught in the Philadelphia association in 1874. These facts are given merely to illustrate that this great organization has always tried to meet the immediate needs of young women. Academic and technical needs alike have been met through definitely organized courses of instruction, while

physical education plays a large part in the educational program of any city association.

Aside from any formal instruction which may be given, the Y. W. C. A. through its many activities is a great educational agency and reaches groups that would find it difficult to avail themselves of any other educational opportunity.

The interest of the association in housing conditions, food problems, social problems, and employment and labor conditions has made it of service to a multitude of girls and women in all callings of life.[1]

*Girl Scouts.* — With the need for democratic organization so important and the formation of habits of initiative, self-reliance, and self-control on the part of girls so imperative, the Girl Scout movement has come into special prominence. The fine practical program of the organization, adaptable to all localities and all types of girls, makes an especial appeal to the enthusiasm of girls of scout age. Scouting is constructive and definite, and "its plan develops individual responsibility and capacity in the service of home, community and state. Scouting is fun. Its program succeeds because girls like it. It opens to them pleasures which answer their natural healthy impulses and imagination and at the same time affords them a stimulating share in the interests and pursuits of adults."

*Camp Fire Girls.* — This organization has also been of intense interest and of educational and social value to many girls. The aims of the movement and the methods of work are based upon the ideas so frequently expressed, viz. — that girls need to engage in voluntary coöperative effort and that provision must be made for them to exercise initiative, resourcefulness, responsibility, etc., in order to become competent members of society. It recognizes the changed economic and social condition of girls and women accompanied by the changed home, and attempts to supplement the training given by the home and the school. The types of activities undertaken by the girls to meet membership requirements are those that "will most effectively make for physical

[1] *Fifty Years of Association Work among Young Women.* By Elizabeth Wilson.

vitality, personal efficiency and spiritual and intellectual vigor as well as to preserve the largest amount of beauty, inspiration and romance in their daily lives."

*Corporations.* — The educational work undertaken by department stores, telephone companies, life insurance companies, textile factories, and other industries and organizations employing women and girls serves a double purpose which is reflected in society at large. The general health, intelligence, and happiness of the great army of women workers assure not only better service and greater returns to the company but greater satisfactions to the employee as well; women in industry are no small part of our social structure and their welfare affects society very materially.

This type of work is still in its infancy, but the possibilities are great, and with the increase in the number of women wage-earners and the inclusion of women in industrial boards immediate and far-reaching progress must result.

*Philanthropic organizations.* — The educational work of philanthropic organizations is varied in character and is administered in a variety of ways. Any organization working with the less fortunate populations must of necessity direct its efforts toward educating the groups they are helping. The Day Nursery where the mother may leave her child while she is away at work, the Free Milk Station or Diet Kitchen where the child's physical needs are met, the clinic and the visiting nurse all hope to do more than meet the immediate needs. They are doing their utmost to teach and to train the mothers through demonstrations, individual visits to the homes, or in classes, to help themselves.

*Club organizations.* — The keynote of all present social activity is coöperation, and one of the most effective organizations promoting coöperation is the club. Its name bespeaks a purpose and a willingness on the part of the membership to work toward some definite purpose. Girls and women enjoy club membership, and under wise direction and guidance this form of organization has become an effective educational and social agency. The very fact that a group is organized makes it possible to reach a larger number with whatever propaganda is necessary or desirable.

The need for developing leadership and initiative and the spirit of coöperation on the part of women is especially urgent at this time, when they are to exercise full citizenship. If club activity can help them it is highly desirable to encourage girls to club membership.

The "Eight Weeks Clubs" promoted by the Y. W. C. A., the Camp Fire Girls, and the Girl Scouts, are given national recognition; while various other clubs including the Canning Clubs, Home Economics Clubs, Agricultural Clubs, and Reading Clubs, financed in part by the government and under the direction of the government, are strong evidences of the worth-whileness of this type of organization from the social and educational standpoint, and are but another evidence that society desires to meet the modern needs of girls and women.

The importance of right leadership is more and more appreciated and the demand for trained women is forcing educational institutions to study the problem and to offer courses of study and opportunity for practice to those whose interests and aptitudes lead them to choose this type of educational work.

## SUGGESTIONS FOR STUDY AND REVIEW

1. What factors have been responsible for the influx of women into industry?
2. Compare the modern attitude of society toward the education of girls with that of colonial days. Account for the difference.
3. Discuss some of the changing ideals in education.
4. Distinguish between teaching *boys* and *girls*, and teaching *subject matter*.
5. In what ways can our system of education be made more democratic?
6. How has coeducation influenced society in regard to the higher education of women?
7. What influence do you think the war will have upon the educational opportunities of women? Substantiate your opinions.
8. What educational agencies aside from schools and colleges are there in your community? Of what help may you be in strengthening their educational programs?

## REFERENCES FOR COLLATERAL READING

The Education of Women. Talbot.
The Home Economics Movement. Bevier and Usher.
The Family as a Social and Educational Institution. Goodsell.
Education for the Home, Part I. Andrews.
Education of Women. Thomas.
(Monograph on Education in the United States.)
School and Society. Dewey.
Democracy and Education. Dewey.
Schools of To-morrow. Dewey.
Changing Conceptions in Education. Cubberly.
Educational Readjustment. Snedden.
A Modern School. Hanus.
Industrial Education. Russell and Bonser.
How to Teach. Strayer and Norsworthy.
Elementary School Standards. McMurry.
The American High School. Brown.
A School Master in a Great City. Patri.
Fifty Years of Association Work among Young Women. Wilson.
Service Instruction of American Corporations. U. S. Bulletin 1916, No. 34.
Girl Scout Hand Book.

## CHAPTER III

## THE DEVELOPMENT OF HOME ECONOMICS IN RESPONSE TO THE NEEDS OF THE GIRL

I. Home Economics in the schools of to-day.
   A. In response to the needs of the girl.
   B. For general education or appreciation.
   C. For vocational purposes.
II. The evolution of Home Economics leading up to these studies in the schools of to-day.
   A. The early school records.
   B. Cooking schools in answer to the needs of the woman in the home.
   C. The contributions of scientists in the development of Home Economics.
   D. The part of the colleges in the development of Home Economics.
   E. Other agencies furthering the development of Home Economics.
III. The scope of the home economics studies of to-day.
   A. Home Economics defined.
   B. The breadth of the field.
   C. Confusion of terminology.
IV. Home Economics in the schools of to-morrow.
   A. Household arts for all. The needs of to-day reflect the needs of to-morrow.
   B. The problem of training the girl for wage-earning or for home-making.
   C. The responsibility of the schools of to-morrow in training for wage-earning.

**Home Economics in the schools of to-day.** — The American home is the center of all American life. From it go forth the men and women who are to mold the thought of succeeding generations in the life of the state and of society in general. The home should present to its growing members the best type of healthful living and sane mental, physical, and moral teaching. It affords the very best

opportunities for some of this education for the larger life which will be lived outside the home or in the new homes which are its offspring. All the arts therefore relating to the home and its efficiency and all the sciences which are applied to home-making should form an important part of the school work of to-day, if we as a nation are to live more sanely, healthfully, and intelligently. There has been brought about during recent years a recognition of the well-ordered home because of its social and civic value, and the home economics subjects have become very important studies in many of our schools. This is due to a rising appreciation of the effect which a well-ordered home has on healthful living, to an increased application of science to everyday household affairs, and to the very recently appreciated necessity for thrift and economy in daily living both through earning and spending.

Home Economics in the schools of to-day should endeavor to work towards the maintenance of the best types of home and family life because they are vital forces in the establishment of a sound democracy. These studies, because of the nature of their content, afford just the right opportunity for the training of the girl as a member of society in her own home and in her community associations. They contribute, as all studies rightfully pursued should, towards the development of the social efficiency of the girl. Home economics studies are unfortunately not always planned or presented with this big controlling thought back of them. They do contribute directly to this aim when they are so taught that they increase in the girl a feeling of responsibility as a member of her family group and awaken in her a desire to participate in promoting the welfare of society of which she is a part.

*In response to the needs of the girl.* — The girl of to-day usually pursues the home economics studies in schools primarily because they are of interest to her. She likes to do, to make things. They form part of her general education or training and she gains through these studies a kind of appreciation for higher standards of home life and methods of conducting the home activities. Many schools in their programs emphasize merely the activities of sewing and cooking, but in many others the scope of studies included in this

scheme for the general education of the girl is broader, and the arts and sciences which have practical application in home life are also emphasized.

The needs of the time have forced those interested in practical education for girls to outline more fully their aims or objectives in this work for girls. The work is now being planned more wisely, with the present-day needs of the world as well as the girl constantly in mind. There are many girls who are interested in these studies because of the vocational opportunities for which this field of practical study prepares them. There are others who undertake it because of a direct interest in wifehood and motherhood and the home. By others the work is undertaken as a phase of study of general interest or education.

What are the needs of every girl of to-day in her own home? She needs primarily to know the principles governing healthful living for herself, her family, and her community. This knowledge would prove to her the relation of health to happiness and to the well-being of the individual and society. In order to learn to live healthfully a girl should know how to select, prepare, and use proper food and clothing. She needs also to know about the sanitation of the dwelling in which she lives, the care of food and of clothing in their relation to health, and the care of the children and other members of her family. She needs to learn to make plans for daily living through right opportunities for work, amusement, education, wise saving and spending.

The girl of to-day needs to have inculcated a sane attitude of mind towards woman's work in the home and outside the home as producer and consumer. Her growing privileges in social and political life demand for her training which will develop interest in civic and national affairs. She needs to be taught (through the home economics studies at home and in school) the relation of the modern home to all these economic, social, scientific, æsthetic, and spiritual problems.

*For general education or appreciation.* — It very often happens that a mother is unable to give her girl any specific training for her most important life work, the maintenance of a home and the rear-

ing of children in that home. If the girl receives no instruction in school and the mother is ignorant, she remains uninformed and the results are disastrous, not only for this girl, but for succeeding generations. This is a matter for general concern, and it seems quite apparent that every girl should pursue as a part of her general education in school certain home economics studies because they meet the needs of every girl in her daily life. This kind of training for girls is offered in our schools of to-day in courses in elementary and high schools and sometimes in college. The aim of these courses is that of general education, and the time allotted for the work varies from one to five hours per week for two or three years. These are not vocational courses with a view to self-support or vocational home-making, but more general, and can only be said to lay a foundation for more intensive courses with a purely vocational aim in wage-earning or home-making.

*For vocational purposes.* — Some of the home economics studies are presented in our schools to-day with an entirely different emphasis in their organization from that described above. They may be organized and presented in such a way as to prepare a girl for the period of self-support through which many girls must pass before becoming home-makers and assuming the duties of administering a home and rearing children.

According to the last U. S. Census report the vocational pursuits of women may be classified broadly as follows: The occupations fall under the headings of professional, agricultural, commercial, industrial, and home-making vocations. Administrators of home economics education are interested in this classification from the vocational study point of view, in (1) *home-making* as a vocation for girls. This is rather different training from Home Economics pursued by her for general education, although the general may lead up to this study of vocational home-making. This distinction is usually confusing in any discussion of vocational education, as no wage is attached to woman's work in her own home, because her economic contribution is not usually rated. It is as a rule only when a girl or woman goes outside her own home to

work that she is said to be "earning a living." A girl then may be trained in school for *vocational home-making* either for use in her own home or in the home of another where she may be employed. This type of training should, however, acquaint her with many lines of study and the home activities as "practiced by the wife and mother in the home." This should be rather more intensive training than that pursued by a girl as a part of general education and should offer greater facilities for practice. This vocational training in home-making may or may not lead to a gainful occupation in the sense of paid service. (2) Vocational work for girls may be of other types than that of home-making. There are many girls who must go to work at the earliest possible moment. Many are interested in vocations relating to commercial and industrial life. There are certain restricted fields of vocational study allied to Home Economics for which intensive training is necessary, as certain *vocational industrial vocations* growing out of the home economics studies; as for instance, dressmaking, millinery, designing, catering, tea-room work, fine laundering, occupation as mother's helper, etc. This type of training may be offered in schools in order that the period of apprenticeship may be shortened. The opportunities open to girls in any locality should shape the aim and content of any vocational course along the line of economic demand.

Vocational training in relation to the home economics studies may be offered in high school or in college. Occasionally one hears of vocational training during the elementary school period. Speaking generally, however, most of the home economics studies now offered in the elementary and secondary schools in various parts of the United States are of the type described above, that for general education purposes, rather than the type having a vocational objective.

**The evolution of Home Economics in leading up to these studies in the schools of to-day.** — Home Economics in schools is not an innovation of to-day. Some phase of study of these arts has for many years found a place in the curriculum for girls in many parts of the United States. The evolution of this work is a most interesting study. It is closely related to a number of movements in education

which preceded it or ran parallel with it. The kitchen-garden movement with its study of household arts; the kindergarten in its relationship to the study of home activities; the manual training movement; the organization of practical teaching in the land grant colleges and universities; the demand of home women for special training in practical arts. All of these movements have helped to create interest in this field of study and have focused the attention of educators on the importance of the home in a democratic society and of some of these studies as a part of every girl's training.

*The early school records.* — 1. The manual training movement. — The early organization of household arts in schools is tied up with the development of "manual training" and its introduction into schools in the eighties, shortly after the Centennial Exposition in Philadelphia, which was an impetus to this movement. The interest in industrial education during the last ten years has stimulated the development of the home economics studies. Special legislation in many states has furthered this growth, beginning in 1906 with Massachusetts, the pioneer state in so many educational movements. In a recent bulletin of the Bureau of Education,[1] agricultural, industrial, commercial, and household pursuits are grouped as occupations for women and studies for which the schools should give training.

Records show that as early as 1798, Boston public school girls spent part of their time on needlework, which was taught by the regular school teachers. In 1821 the Boston School Committee permitted sewing to be introduced into the primary schools and in 1835 into all the second and third grammar grades. Later, in 1854, the Board of Education extended this privilege, and sewing was taught in the fourth grade of the grammar school. It is said that this followed the demand of philanthropic individuals that children of the poor and needy should be taught to sew.

Next to sewing, drawing as a phase of industrial training was introduced by the Massachusetts Legislature in 1870, and was made obligatory in the public schools of the state. This paved the

[1] *Vocational Secondary Education.* Department of the Interior, Bureau of Education, Bulletin 21, 1916. 15 cts.

way for other industrial training, and in 1872 the Legislature of Massachusetts legalized the teaching of sewing and other industrial education.

Although Massachusetts took the lead in introducing industrial education in the United States, there was interest in the teaching of sewing and cooking in other parts of the country as early as 1876. This was largely of a philanthropic nature and started by private initiative for the purpose of improving social conditions. New York, Boston, Philadelphia, Chicago, and other cities all had classes contributing to the improvement of social conditions. Many of the classes started by private enterprise were finally taken over by the school boards of these various cities.

2. The kitchen-garden movement. — Running parallel with the development of sewing and cooking in the schools was the kitchen-garden movement started in 1877 by the late Miss Emily Huntington of New York.[1] The kitchen garden taught Home Economics by means of miniature toys, each pupil having a set of toy models of household furnishings and equipment. Through a program of songs and games the activities of the home were taught. The name kitchen garden was suggested by kindergarten, and Miss Huntington wrote a description of it in her book in 1901.

Kitchen-garden methods have been modified and taught in the lower grades. They have found their way as a more definite system in classes of church schools and settlements, neighborhood houses and the Young Women's Christian Associations. This system has been developed by Miss Mabel Louise Keech[2] with equipment which is larger than that used by Miss Huntington. The criticism of the small toys was that they were not real. The results in either case will depend on the organization of the play on an educational basis. The aim was to secure the interest and mental reaction through this organized play recreation. The modern plans for housekeeping in flats are really the outgrowth of this early movement.

[1] *How to Teach Kitchen Garden or Object Lessons in Household Work.* By Emily Huntington. Doubleday, Page & Co., New York. 1901.

[2] *Training the Little Home-Maker by Kitchen Garden Methods.* By Mabel Louise Keech, Philadelphia. Lippincott. 1912.

The Kitchen Garden Association of New York developed into the Industrial Education Association in 1884, in recognition of the fact that the home economics studies were a part of the manual training movement, and began a propaganda in relation to this field of work. The object of this association was to train girls in domestic economy and to promote training for both boys and girls along lines leading to self-support. Their aim was also to secure the introduction of these studies into schools and to study methods and systems of industrial education. This meant a new interest and impetus in teaching these and other subjects, for interest was aroused in new methods of teaching as well as in these new school subjects. This Industrial Education Association established the New York College for Training Teachers in 1888, which has since developed into Teachers College, Columbia University.

Miss Maria Parloa started the first training of teachers of Home Economics in 1880 in the organization of the normal class at the Boston Cooking School. The chief early sources for trained teachers of home economics for public school work were, in addition to the above, Pratt Institute, Brooklyn, established in 1887; Drexel Institute, Philadelphia, in 1891; and Kansas State Agricultural College with its early courses. Mrs. Hemenway in 1888 established a private normal school of Home Economics. This later became the Framingham State Normal School (Massachusetts). Normal training has progressed very rapidly since then and normal schools and colleges are turning out many splendidly equipped teachers.

Perhaps no one is more worthy of notice in relation to the development of Home Economics in schools and colleges than Mrs. Ellen Richards, who gave her life to the study of the application of science to the many problems of the household and who for years engaged in promoting education along these lines in schools and colleges. Thus the demand for practical education in our schools had a start. It has grown and developed until to-day life's real activities in relation to the home are a part of the regular program of most schoolgirls. The Smith-Hughes Act recently passed by our Federal government appropriates large sums of money for vo-

cational education, and the studies in relation to the home have an important place in this vocational scheme. From very small beginnings through private enterprises has developed this scheme for the country-wide training of teachers for vocational work and the introduction of training below college grade in vocational subjects.

3. The kindergarten movement. — The kindergarten movement followed closely the development of "manual training" and industrial education in our schools and is in a way closely related to the development of Home Economics. The home activities form a source of much of the material used in the kindergarten, and the home problems of child care and home management are necessarily those which such a movement would attempt to improve. Problems in relation to proper food and its care, proper clothing, hygiene and sanitation in the home, personal hygiene, home economy, religious and moral instruction of children, are all kindergarten problems as well as those of the home economics field. It may be said then that training in Home Economics begins in the kindergarten with the desire on the part of the kindergarten teacher to coöperate closely with the home and to supplement instruction given there.

4. Other early interests. — In any review of the evolution of the home economics studies mention should be made of some of the early interests in domestic economy. It has been said that Mrs. Emma Hart Willard discovered Domestic Economy as a school subject and that Miss Catherine Beecher developed it. Mrs. Willard had a private school for girls at Middlebury, Vermont. In 1818 she appealed to the New York State Legislature for a state grant for girls' education similar to that for boys, but in outlining her plans she included "domestic instruction" in her scheme. She believed that a system to guide practice, based on rules and reasons, would improve housewifery, and that housewifery might be greatly improved by being taught.

*Cooking schools in answer to the needs of the woman in the home.* — No study of the history of the development of household arts would be complete without mention of the many splendid courses in

relation to the home, established in answer to the demand of the women of the homes. Much has been done for them, especially in recent years, through popular literature and periodicals; but as early as the seventies there was a demand on their part for some organized instruction along household lines. This began with the demand for cooking schools. These schools of cooking paved the way for instruction in Home Economics in the public schools. They demonstrated the practical value of learning to serve good food at small expense, and showed the need for this type of practical instruction. It has usually followed that private cooking schools developed into public instruction in cookery in the public school systems. This movement spread all over the country with New York, Boston, and Philadelphia as centers.

*The contributions of scientists in the development of Home Economics.* — In this early domestic economy movement mention must also be made of the increasing interest in scientific problems relating to the household. One of the world's great physicists, Count Rumford, devoted much of his time to the study of heat in its relation to domestic problems. He thought the household well worthy of study and helped to place all the domestic problems of heating, ventilation, fuels, kitchen ranges, utensils, etc., on a more scientific basis. Count Rumford was born Benjamin Thompson, an American, at North Woburn, Mass., in 1753, and died in 1814 in Europe.

Edward L. Youmans, an American scientist (1821–1887), was also interested in science related to the household. He published, in 1858, his work called "Household Science." Mr. Youmans was a chemist and in this textbook brought together the contributions of chemistry, physics, and biology in their relation to the household.

Another scientist who contributed much to the development of this scientific study of home problems was Mrs. Ellen Richards, a New England woman. Mrs. Richards was graduated from Vassar in 1870 and in 1871 entered the Massachusetts Institute of Technology as the first woman student. She later became instructor of sanitary science at this institution and served it for over thirty years. Mrs. Richards was famous as a sanitary chemist and was

especially interested in the application of science to problems of food, shelter, and clothing. She was the author of many books. "The Cost of Living," "The Cost of Food," "The Cost of Cleanliness," "The Cost of Shelter," "The Art of Right Living," "The Chemistry of Cooking and Cleaning" are perhaps some of the best known. Mrs. Richards was one of the founders of the Lake Placid Conference on Home Economics which met yearly at Lake Placid from 1899 to 1908. She was elected first president of the American Home Economics Association, the outgrowth of the Lake Placid Conferences, at the meeting held in Washington in 1909. Mrs. Richards was interested in many experiments in relation to food and coöperative plans of living. No student of Home Economics should fail to study the story of Mrs. Richards' life and work. "The Life of Ellen H. Richards," by Caroline Hunt, gives some idea of this remarkable woman's work and interests. Perhaps no one has given a greater impetus to this field of work, or convinced so many people of the national necessity of this kind of education in our schools.

Other scientists have followed and contributed scientific study and investigation of such household problems as diet, digestion, nutrition, dress, health, and amusement. Scientific contributions have also been made by those interested in housing, textile study, management, cost of living and domestic service, and the scientific foundations of this field of education are yearly growing stronger and more interesting.

*The part of the colleges in the development of Home Economics.* — In tracing the development of Home Economics in our institutions for women one should study the records of state colleges and universities which welcomed this practical form of education. As early as 1872 the State College of Iowa gave lectures on housekeeping. In 1873 the State College of Kansas gave its first instruction in sewing, and in 1875 a course in foods. In 1874 the University of Illinois, then the "Industrial University," started to develop home economics instruction and a course of four years leading to the bachelor of science degree in the school of domestic science was planned. Kansas, Iowa, Oregon, and South Dakota

had departments in their state colleges by 1890. During the next ten years others were added and the number increased to thirty. To-day practically all state colleges or universities have departments of Home Economics. No one agency has helped to develop home economics teaching or has been more effective than the land grant colleges. From the beginning they have recognized the necessity for placing this work on a scientific basis and of maintaining college standards for this field of work.

The colleges for the higher education of women have also helped to advance the cause of home economics education by placing all education for women on a firmer foundation.

*Other agencies furthering the development of Home Economics.* — In 1913 the United States government founded the Children's Bureau and so contributed to the development of Home Economics.

In 1914 the United States Bureau of Education showed its interest in the development of Home Economics by publishing a series of bulletins on education for the home[1] by Dr. Benjamin Andrews of Teachers College.

In 1914 the Smith-Lever Bill was signed by the President. This was the first time specific legislation for the home had been made by the Federal government. This Act provides for "coöperative agricultural extension work which shall consist of the giving of instruction and demonstrations in Agriculture and Home Economics to persons not attending or resident in the agricultural college." By this act Home Economics is taken to the very doors of the people. The Federal money provided for this work is used through the extension departments of the agricultural colleges.

In 1915 the United States government appointed two specialists in Home Economics in the Bureau of Education, Mrs. Henrietta Calvin and Miss Carrie M. Lyford. Through their very sane work and efforts the work of the schools in Home Economics of the entire country is being coördinated and placed on a better basis, and excellent news letters and bulletins of a most helpful kind are being disseminated.

[1] *Education for the Home.* In 4 parts. United States Bureau of Education, Department of the Interior, 1914, Nos. 36, 37, 38, 39.

In 1917 the Smith-Hughes Bill for Federal money for vocational education was passed. "This bill would provide Federal Aid to coöperate with the various states in the maintenance and support of vocational schools of Agriculture and Home Economics and the Trades and Industries for persons fourteen years of age and over, and in the maintenance and support of schools for training teachers for the vocational subjects in these vocational schools." What will be the effect on social life of the development of vocational Home Economics, is a question which is just now most prominent in the minds of teachers of this subject.

The Smoot Bill aims to provide Federal aid for research or experimentation in Home Economics at the land grant colleges through their experiment stations, and is another indication of interest in the problems of the home.

The Lever Bill, passed in August, 1917, provided in connection with the Food Administration Federal money for the appointment of demonstrators and agents for city as well as country work.

The movement is ever onward and upward, and the life of the whole republic will profit because of education for better homemaking.

**The scope of the home economics studies of to-day.** — Confusion very often arises in planning work in the field of Home Economics because of the many terms used for different aspects of it. What is it that makes the multiplicity of terms so puzzling? One hears and reads many other terms for this field of work besides household arts or Home Economics. Why is it that the nomenclature for the different branches of this field of study does not always suggest the aims for the group of studies? The haphazard method of introduction in some schools proves that aims or objects in work have not been carefully analyzed.

It is known that the home economics studies are very commonly taken by both girls and women, and sometimes the boys too have a share. It is now quite generally conceded that this group of studies is an essential part of a girl's education, but have not boys, too, a right to some of this knowledge which will enable them to live happier and more healthful lives? Should not one consider

why these studies or some of them at least should form a part of the school program of both girls and boys? Women and men together make the homes of our land, and both should understand the problems of home-making and be able to work together to build the home of to-day and of the future. One thinks here of the kind of home in which the biggest and broadest kind of coöperation will be in force, not only within the home itself but in relation to the institutions outside the home. The purity of family life must be maintained if our nation is to prosper, and our social life demands an education which is of value in the home. This is especially true of the social life of this period of reconstruction following the great war. The coöperation of parents with school and church authorities in the organization of religious and moral instruction, as well as actual training for the duties of the home, will aid in this preservation of right ideals for home life. The studies called Home Economics have a direct bearing on these very vital things of life, for included in this group are many studies touching all the problems concerned in healthful, sane living. These if rightly pursued are bound to introduce new standards into the lives of our young people, and an attitude towards a life of service and coöperation. In the next few paragraphs the home economics studies will be discussed and the terms defined. The present lack of definition is often confusing and prevents clear thinking along these lines.

*Home Economics defined.* — Home Economics is a subject that centers around the problems of the home and other institutions whose problems are of similar nature. It includes a study of food, shelter, and clothing viewed from the standpoint of hygiene, economics, and art and a study of the relations of the members of the family to each other and to society. This is a very broad conception of the meaning of the home economics studies, for so often they mean merely cooking or sewing in the girl's program. These are of course two of the very useful activities which are pursued in the home and should form part of the program of work, but alone they will not fulfill these broad aims for this field of study. Is it possible to show why this is true and what the points of difference are between a program which presents only technical work in food preparation

or the preparation of clothing and one which is broader in its content?

*The breadth of the field.* — What are the studies which are included in this group called Home Economics? Perhaps the outlines on the following pages may serve as a basis for discussion and show the relationship of studies within this field. They will at least give some conception of the very rich content afforded. A teacher in the preparation of a course of study for a particular group of pupils should know not only the needs of her particular group, but should also be able to weigh the values of all of these studies in relation to the pupil's aims and needs. A good course of study in Home Economics for any school is the result of good judgment on the part of the teacher in weighing the relative values of all the studies of this group in relation to the aims or objectives and needs of her particular group of pupils at a particular time. The subject matter of these studies in Home Economics as listed or shown in the outlines does not form a plan for a course of study, but serves merely to put before the teacher a list of possible studies or topics from which she can prepare her particular course, whether the aims for it are of a general nature, sometimes defined as general or cultural Home Economics, or of a vocational nature.

The studies in the field of Home Economics may be analyzed and outlined from several points of view. In comparing these outlines it will be noticed that they all include about the same topics or subject matter for study. It will be seen that Home Economics is a complex made up of many studies. Agriculture and engineering are also examples of complex studies. It will be noticed also that there are many contributing studies which touch this field, such as mathematics, biology, chemistry, and other sciences, as well as art, history, economics, and sociology. It will be interesting to compare these outlines with the "Syllabus of Home Economics"[1] published by the American Home Economics Association, and also to chart the subject matter as outlined in that syllabus.

[1] *Syllabus of Home Economics.* American Home Economics Association, Cathedral Street, Baltimore, Maryland, 1913. Paper 50 cts., cloth $1.00.

## OUTLINE I

### Home Economics Studies

| | |
|---|---|
| I. *Sewing.* | *Art* — Color, line, design. |
| Useful articles. | *Science* — Physiology — Hygiene of clothing — Textiles — Chemistry — Cleanliness. |
| Clothing and house furnishings. | *Economics* — Choice of clothing for family income — Relation to family income — Relation to world's industry. |
| Selection. | |
| Making. | |
| Care — mending, laundering, remodeling. | |
| Conservation in use. | |
| Production of clothing materials. | |
| II. *Cooking.* | *Science* — Physiology — Biology — Nutrition — Chemistry — Bacteriology — Hygiene and Sanitation in care of foods. |
| Food. | |
| Selection. | |
| Preparation and service. | |
| Care — outside and within the home. | *Art* — Service of foods. |
| Conservation in use. | *Economics* — Relation to family income — Choice. |
| Production of food materials. | |
| III. *Home Management.* | *Art* — House furnishings and decorations — Selection of home. |
| Ideals and appreciations in establishing a home. | *Science* — Chemistry — Bacteriology — Physics — Sanitation of home. |
| The budget — division of income. | *Ethics* — Relationship of members of family to home and community. |
| Selection of the home. | *Economics* — Division of income — Relation of home to outside world. |
| Decoration of the home. | |
| Selection of furnishings. | *Sociology and History.* |
| Care and repair of house furnishings. | |
| Division of labor in home. | |
| Care of members of family. | |

## OUTLINE II

### Home Economics Studies

*The Home and Its Management*

I. *Managerial Service.*
Ideals in establishing.
Division of income.
Selection of the home.
Decoration of the home.
Furnishing of the home.
Division of labor in the home.

II. *Activities within the Home.*

| | |
|---|---|
| Cooking and food problems. | Preparation and service of meals. |
| | Purchase and care of food. |
| Sewing and clothing problems. | Making clothing and house furnishings. |
| | Mending clothing and house furnishings. |
| | Purchasing and care of clothing and house furnishings. |
| Cleaning. | Care and laundering of textiles. |
| | Care of rooms. |
| | Care of furniture and furnishings. |
| Entertaining. | Hospitality to friends. |
| | Amusements for family. Reading, music, etc. |
| Care of members of family. | Children, old people, sick. |

## OUTLINE III

### Home Economics Studies

A. Clothing.
B. Shelter.
C. Food.

A. *Clothing.*
I. *Selection and Purchase of Clothing and Clothing Materials.*
II. *Care and Conservation of Clothing.*
III. *Making Clothing.*

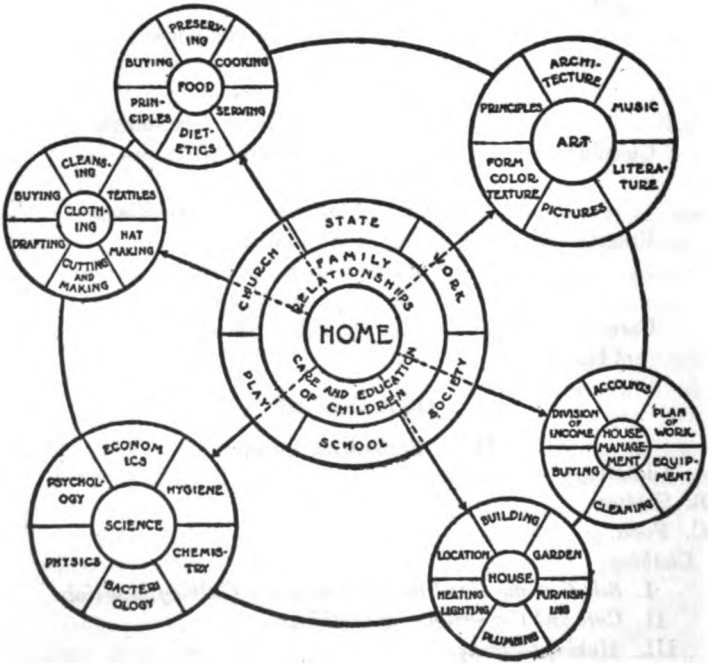
B. *Shelter.*

I. *Ideals and Appreciations in Establishing a Home.*
II. *The Budget. How to Divide Income.*
III. *Selection of the Home and Its Decoration.*
IV. *How to Select and Purchase Household Furnishing.*
V. *System in Care and Repair of Household Furnishings.*
VI. *Division of Labor in the Home.*
VII. *Care of Members within the Home.*
VIII. *Hospitality within the Home.*
IX. *Relation of Home to Community Life.*

C. *Food.*

I. *Selection of Food.*
II. *Storage and Care of Food.*
III. *Preparation of Food.*
IV. *Serving of Food.*

## OUTLINE IV



*Confusion of terminology.* — It is true that this field of education for the home has no common terminology. It would probably be very helpful if it had. This lack of common terms leads to a great deal of confusion, especially as much state legislation is being enacted in relation to the teaching of home subjects in schools and it is often extremely difficult to interpret the various laws; or, to put it in another way, many interpretations of the one law often result because of this lack of definition and differentiation in relation to education for the home. In some states the term domestic science means cooking, while in others it is used to cover the entire field of education for the home, that is, it includes such subjects as dressmaking, textiles, household management and housewifery, household sanitation, and cooking. Under other laws domestic economy is the inclusive term, or household economics or home economics.

1. A common terminology would be helpful. — The term household arts is also used in a number of schools in this large inclusive way, synonymously with home economics. There is some confusion in this use because of the publication of the Bureau of Education, Washington, entitled "Vocational Secondary Education," Bulletin 21, 1916.[1] In this bulletin, which is the only Federal publication devoted to the discussion of vocational terminology, the term household arts is used always for that type of education in relation to the home which is of a general nature, given for broad appreciation and knowledge. This household arts education, as defined there, is such as one finds in most schools of elementary or higher grades where from one to five hours per week or more are devoted to instruction of this general nature, including manipulative instruction and proficiency as far as time permits. This terminology distinguishes between general household arts for appreciation in schools of elementary, secondary, or sometimes college grade, and vocational home-making education, and vocational industrial education. In this bulletin the training for wage-earning as cook or seamstress, milliner, or dressmaker, would

[1] *Vocational Secondary Education.* Department of the Interior, Bureau of Education, Bulletin 21, 1916. 15 cents.

be classified as *vocational industrial education;* that education which prepares the young woman to perform efficiently the duties of the housewife, as *vocational home-making education.* This terminology is recommended for our use and is being used by many framers of legislative bills in relation to vocational education.

2. Some distinctions between general and vocational instruction in education for the home. — The term Home Economics has perhaps been most generally accepted as the term used most broadly in relation to education for the home. This term was adopted by the American Home Economics Association and by its predecessor, the Lake Placid Conference on Home Economics. In this nomenclature no attempt has been made to distinguish between the various gradations of the subject, as for instance Home Economics for elementary school, high, normal, or college work. Nor does it make any distinction between home economics instruction which is for general appreciation and that for vocational education within this field; as, for instance, dressmaking as a vocational study, or food preparation for catering as a vocation. Would not some distinction between the vocational objectives of the home economics field and the general objective for education for appreciation be acceptable? The vocational secondary terminology mentioned above suggests the term *household arts* for all schools, whether elementary, secondary, or college, where the type of instruction is for *appreciation,* although in any one of these schools at the same time it is possible to introduce education for the home of a vocational nature, that is, *vocational home-making* and also in the same school *vocational industrial education* for the training of dressmakers or caterers, etc. Some term is needed for the field of home responsibility which is well rounded and complete. Home manager, home-maker, housekeeper, have all been suggested, but the term *vocational home-making education* would seem to solve this difficulty. It has been suggested by some of the leaders in vocational education that Bulletin 21, "Vocational Secondary Education" might well be called the bible of vocational education. Finally it must be remembered, however, that these studies about the home need not always be distinctly vocational in nature, and some distinction

in terminology should be made between the general and the vocational training in home economics education.

**Home Economics in the schools of to-morrow.** — The needs of to-morrow are reflected in the life of to-day. The home economics studies have become an essential phase of the education of to-day because the study is a social one and the demands of everyday living make it one of prime importance in the life of the girls of to-day. The world is turning to the woman of the home to care for the sick, to nurture the children, to plan and manage through economy and thrift, to save food, clothing, fuel, and supplies of all kinds, and to use her ingenuity in a thousand ways to alleviate the sufferings of the world. It is to the women of all lands that the call comes to maintain the homes of these lands and to upbuild and uplift.

The years before us will be those of readjustment and reorganization; there are some signs and influences of the times indicating the way. Home Economics will have a prominent place in the school program because it is a national necessity. Society as never before will need all the help which the home through its sustaining influence can bring to bear on the problems of national life and reconstruction during the years following the war. We find ourselves to-day in a whirl of life more complex and puzzling than ever before because of changing conditions. The increased cost of living with the numerous complications involved, the problems of labor, the changing conditions of home life, the place of woman in modern industry, are all indications of some of the changes which the future will bring. The schools of to-morrow must be ready to meet these changes and in the schools of to-day these readjustments must begin. The responsibility weighs heavily now upon those interested in vocational education or those planning the development of Home Economics in our schools, in seeing the relationship which this study bears to the development of the modern school, and the effect which this study will have on the future life of our country. The responsibility is a weighty one, of adjusting the pendulum so perfectly that the best studies are offered to our girls, those which will help to make them

of greatest value to society, the most useful citizens, within and without the home. We must bring to our girls the fullest realization of life, and show them the relationship of the home to national life and progress. A nation is no better than its homes. It has been said, "Remember that the success of the nation of to-morrow depends upon the characters built in the homes of to-day." A real peril is before us when the homes of this land are conducted with lack of intelligence concerning the problems involved and with lack of understanding of the relationship of the individual home to the success of the community and to the life of the nation. The homes must be made centers of life and good influence which will help to develop men and women with a right attitude towards the problems of life. The crying need of to-day and to-morrow is a challenge to men and women who realize that the highest good to be attained in life is through service, and that there must be other interests besides the selfish ones of the individual life.

The schools of to-morrow in planning for the home economics studies must create better standards for home life. The home is the center as well as the background of the activities of the state. The problem of creating better homes is an ethical and a spiritual one, but the spiritual atmosphere cannot be quite right unless the material conditions of the home are properly adjusted.

*Household arts for all.* — Every girl in the schools of to-morrow will have some training in Home Economics as a phase of her general education, whether she leaves school at the age of fourteen, eighteen, or twenty-five, and without regard to her possible future vocation for self-support during the years before matrimony. This is a matter of common, general welfare, and the future of the state demands that women know how to maintain their homes in an intelligent manner, and to promote the health of the individual members of the family. This means more liberal living, and better health and efficiency for service outside the home.

*The problem of training the girl as wage-earner or as home-maker.* — One cannot discuss the future problems of Home Economics in our schools without full consciousness of woman's responsibility for work outside the home. One must think also of the home

economics studies in their relationship to her future responsibilities as a wage-earner. If the general type of home-making education of the girl will improve the homes of our land, certainly the specific education of girls for their work as wage-earners in shop, office, or factory, in homes or institutions, or on the farm, will add to the wealth of the country and the greater efficiency in business life which is now necessary.

Economic conditions because of lack of men workers and the probable high cost of living because of scarcity of materials will force and attract many women to fields of work outside the home.

Some of these wage-earners will be girls who will go directly into wage-earning occupations at the earliest possible moment because self-support is imperative; others will add to the elementary school course a high school program or part of it before engaging in a gainful occupation; and there are some who will have larger opportunities and will delay their preparation for gainful occupation until the college period.

*The responsibility of the schools of to-morrow in training for wage-earning.* — According to our last census of 1910, 8,075,772 girls and women of the United States were paid workers. About 40 per cent of all women from sixteen to twenty years of age were working for wages, and women were employed in 105 of the 116 principal occupations. The world upheaval has broken down every barrier and opened to women unthought-of opportunities for work and service. Every census shows an increase, and probably 12 millions of girls and women of the United States are to-day wage-earners.

This state of affairs places a tremendous responsibility on the school, which has been aware of the great increase in recent years of the number of women engaged in self-support. The modern trend of vocational education in schools is an acknowledgment of this condition of affairs, and the Federal money recently appropriated will help to accelerate this work. It is well known that but very few of the vast number at work have had any training or preparation for it. It is certain that only as a girl is informed and trained can she hope to take advantage of the splendid opportunities for work and service open to her. This means that the

schools of to-morrow must make provision for training girls and women for wage-earning pursuits.

According to the census of 1910 women are engaged principally in the following lines of work:

Transportation ..... 106,596
(Telegraph operators, telephone, mail service, etc.)
Trade ..... 468,088
(Saleswomen, clerks, etc.)
Clerical work ..... 593,224
(Stenographers, cashiers, etc.)
Professional service ..... 733,885
(Teachers, physicians, nurses, etc.)
Agriculture ..... 1,807,501
(Farm laborers, dairy workers, florists, etc.)
Mechanical pursuits and manufacturing ..... 1,820,980
(Dressmakers, factory workers, etc.)
Domestic and personal service ..... 2,530,846
(Servants, housekeepers, laundresses, waitresses, etc.)

The schools of both urban and rural localities should open up the fields of wage-earning opportunities for women in their particular localities and should give opportunity in school for certain lines of vocational training needed in the locality. Girls should be informed of possible ways of earning money at home if they are compelled to stay at home, and of the opportunities in various fields open to them outside the home. The fields of greatest interest along home economics lines of study, and fields growing out of these studies, have been referred to above and offer unusual opportunities to women and girls for wage-earning and interesting lines of service.

The home economics studies for which general household arts may have been a good foundation, when pursued for wage-earning, may be classified as follows:

1. *Vocational industrial pursuits* in training of the dressmaker, milliner, seamstress, cook, tea-room manager, caterer, house decorator, housekeeper, etc. Courses leading towards these aims or objectives will be so organized in the schools of to-morrow that a girl may

be able to pursue the studies in training for these lines of work in all-day schools, in part-time classes, during day or evening, either in separate schools or in the high schools, according to the needs of the locality and administrative possibilities. A survey of the needs of the community, factory, shop, or office as well as the needs of the girl should always precede any organization in schools of courses leading towards training for wage-earning.

2. *Vocational professional pursuits*, as dietitian, institution manager, etc.

3. The home economics studies for which general household arts training may have been a good foundation when pursued for home-making as a vocation or for wage-earning in the home may be classified as *vocational home-making education*. This should be intensive in character, and the courses should offer facilities for training the girl or woman in the activities of the home as performed by the wife and mother in the home. The household arts which will be a part of the general education of every girl will be the foundation for such a course and lead naturally to it for those girls who know they are soon to become home-makers and wish to prepare themselves for such duties, or for those who wish to enter on some phase of home service for wage-earning in the capacity of assistant to the home-maker, in the administration of her home and the rearing of her children. Such courses for the training of the woman in vocational home-making will be offered in private and public institutions, in part-time courses, in units which may be taken gradually until the full aggregate is attained. Opportunities will be offered in such training for practice in the activities of the home and also in the management of a home under varying conditions. This will mean a new type of equipment and a new type of teacher. The specialist in nutrition or costume design will not be in demand for teaching in this field, but rather the woman of home experience who is interested in making the home a center of helpfulness for all members of the family group.

## SUGGESTIONS FOR STUDY AND REVIEW

1. What should Home Economics in the schools of to-day aim to do for the girl? In what ways have the needs of the times affected these aims?

2. Why does every girl need some training in the home economics studies?

3. What is meant by vocational instruction in Home Economics as differentiated from instruction for general education in Home Economics?

4. What is meant by the introduction of manual training into the schools?

5. How did the kitchen-garden movement affect the development of Home Economics in schools?

6. What were the aims of the Industrial Education Association of New York City?

7. In what way did Mrs. Ellen Richards contribute to the development of Home Economics in schools?

8. How did the cooking schools and classes help further the cause of Home Economics?

9. What contributions were made by the early scientists to the problems of the household?

10. How have the colleges, especially the land grant college, helped in the development of Home Economics?

11. What Federal legislation has helped to develop home economics instruction in our schools?

12. Get all the information possible in relation to the Smith-Hughes Act. How will it affect the development of Home Economics in schools?

13. How do you define Home Economics as a subject of instruction?

14. What constitutes a good course of study in Home Economics?

15. Discuss the problems of terminology in relation to Home Economics. How would you distinguish between household arts and home economics studies of a vocational type?

16. Discuss Home Economics in schools as a factor in the education of the girl for better citizenship, in the life of to-day and to-morrow.

17. In what ways may home economics training lead to self-support either in industry or the home?

## REFERENCES FOR COLLATERAL READING

Education for the Home, Parts I, II, III, IV. Andrews. Nos. 36, 37, 38, 39, 1914, Bureau of Education, Department of the Interior, Washington, D. C.

Vocational Secondary Education. Bulletin 21, 1916, Bureau of Education, Washington, D. C.

History of Home Economics Movement. Bevier and Usher.

Life of Ellen H. Richards. Hunt.

Syllabus of Home Economics. American Home Economics Association, Baltimore, Maryland.

Lake Placid Conference Reports, 1899–1908.

## CHAPTER IV

## THE INTERRELATION OF HOME ECONOMICS WITH OTHER SUBJECTS IN THE CURRICULUM

I. The modern tendency in education toward unification of the curriculum.
   A. The need.
   B. Correlation of subjects as a response to the need.
II. The opportunities for correlating Home Economics with other subjects.
   A. In the elementary school.
   B. In the high school.

**The modern tendency in education toward unification of the curriculum.** — *The need.* — From a careful consideration of the present demands made upon women of to-day and of their increasing opportunities and responsibilities it becomes evident that their education must be such as will best fit them to meet the complexities of modern life.

As has been shown in previous chapters, many of the former home industries have passed out into commercial and industrial enterprises and women's time has been released to that extent for the performance of other tasks. Many of these processes, however, still remain; for the most part the preparation of the meals for the family, the repairing and making of at least a part of the clothing, the purchasing of the household supplies, and the rearing of the children are still performed by the wife and mother in the home.

In addition to these have come her larger responsibilities without the home which she cannot neglect because they so closely affect herself and her family within the home: the health and sanitation of the city, the cleanliness of the food supply, the conditions of factories and workers within them, where so many of her garments

and supplies are produced. That she may have the time required and the energy necessary for the performance of these larger duties she should make use of all the resources at her command for the reduction of the mechanical processes of the home-making to a minimum. She should know how to organize and systematize, should know the physical and chemical laws on which her cooking and cleaning depend, and should have these in such working order that they will quickly respond to her need. Housekeeping processes can no longer be left to the rule-of-thumb or lucky chance methods on which they used to depend.

The chemistry and physics which were taught to women and girls when first they made their way into the science courses beside their brothers were such as were applicable to their brothers' field of work, and it is only within comparatively recent times that any effort has been made to apply the same laws of heat and energy and chemical reaction to the fields in which they have the greatest application for women. The charge that women are not interested in science and do not grasp its principles, do not in fact have scientific minds, is due rather to the fact that in the past those principles have been taught through phenomena that do not come into the life and knowledge of women, than that women have any less ability for comprehending the truths of the subjects. To-day all these resources must be called upon in order to free household tasks from drudgery and women from the harassment of a round of petty duties that cannot fully engage their time and intellect, and so foster the growth of the discontent and dissatisfaction with the life of the home-maker that is increasingly evident in modern life.

*Correlation of subjects in response to the need.* — Habits of systematic organization, of ready application of facts in one field to situations in another, cannot be acquired at will, and these habits if desirable should be established through repeated exercise during the formative period of life, particularly the school period. By experimentation psychologists have learned that facts to be remembered must tie up with others already in the possession of the learner, that isolated facts unless impressed with great vividness are quickly forgotten, and it is only as material be-

comes organized into well-connected systems that it is recalled and becomes useful. Consequently a marked tendency in education to-day is toward the unification of the curriculum, the careful organization of facts within subjects, the breaking down of the barriers around subjects and the application in all subjects of principles in others that can be reinforced and emphasized by this interrelation. Important topics in history will be the better understood and remembered if they are reviewed and reinterpreted in the light of their application in the industrial world; principles of science will be the more usable if taught in connection with their applications to the materials handled in everyday life; and mathematics will assume new meanings if taught through mediums of everyday exchange of commodities and if applications are made to the other subjects in the curriculum wherever possible.

Valuable as is this interrelation of subjects it should nevertheless be used with care and discrimination, and there have been many instances of its misuse since the principle was first recognized. Vital and worth-while connections only should be thus emphasized. To quote as an instance of valuable correlation, as did one supervisor recently, the fact that the art teacher in planning designs for bags to be executed in the sewing class was careful to put tropical animals under tropical trees — possibly a Molly Cottontail under a cottonwood tree, since this was for a cotton bag — or as did the young practice teacher in physical training who reported to her supervisor that she had taught a certain class to dance the tarantella because she had seen an exhibit of macaroni hanging on the walls of the schoolroom and judged that the class was studying that product, is to follow the letter of the law and ignore its spirit.

Had this particular physical-training teacher known that in history the class was making a study of Italy and Italian peoples, that macaroni was taught as one of the commercial products and staple articles of food of those people, then the tarantella would have been a well-chosen dance to teach as a means of interpreting and understanding a vital part of the life and customs of those people. In one school where true correlation was a conscious principle in the organization of the curriculum the children were

taught the dance of the reaping of the flax at the time when they were studying that fiber in industrial arts. And why? Because that dance is peculiar to Belgium in the districts where flax is grown extensively, and is typical of the daily life of the people. The motions of it have grown directly out of the movements made in the pulling, rippling, and hackling of the flax. To fully understand and appreciate the life, customs, and recreations of those people we must enter into that life through participation in those same activities and recreations.

**The opportunities for correlating Home Economics with other subjects in the curriculum.** — *In the elementary school.* — In the elementary school period, correlation may be easily and naturally provided for. In fact, in the first two or three grades there seems no valid reason for the curriculum's being other than one big study in which now the arithmetical phases are emphasized, now the historical, now the geographic or social, as the occasion seems to demand. The important thing is to find the subject or subjects that will be large enough and many-sided enough to form the central core from which these various aspects may naturally arise. These studies must not only be of sufficient scope and capable of forming many connections, but must also be of interest to the child and adapted to his needs at his present stage of development and not dependent on the remote future to give them significance and interpretation.

1. Industrial arts as a means of unifying the work of the first six grades. — Many schools are at present making use of the study of industrial arts to furnish the unifying central idea for the work of the first six years of the elementary schools. The subject of industrial arts is defined by one teacher of the subject as " a study of the way man provides himself with food, clothing, shelter, tools, and utensils and puts himself on record." With each one of these divisions of the subject the children are in contact from their earliest childhood. In the home, before the school days begin, each one helps in satisfying his daily needs, so that the school has but to take the interest already created in the child and direct it into lines that will have educational value.

Dr. James E. Russell in his article on "The School and Industrial Life" says:[1]

A well organized course of study in the industries must be the joint work of technical and pedagogical experts. The scientist will be called upon to contribute his share, and his contribution will be no inconsiderable amount. At one stage of the course emphasis may be placed upon the processes of production; at another stage the stress may be upon manufacture, distribution, or consumption. Nature study, agriculture, the fisheries, forestry, and mining will furnish indispensable information. Geography, biology, physics, and chemistry will each add their quota of knowledge. Facilities for transportation, the production and transmission of power, and the agencies of trade and commerce will have a bearing on the problem. But the chief consideration in the course of study is the ordering of the industrial processes by which raw materials are transformed into things of greater value for the satisfaction of human needs. . . . The plan calls for richer courses in arithmetic, nature study, and geography. The quantitative measurements of arithmetic will find concrete application in every step of the industrial process from the first step of production of the raw materials to the end of the series when goods are turned to practical use. . . . . The natural distribution of metals, fuels, clays, and other earth materials, the climatic and physiographic conditions which determine the location, amount, character and availability of our flora and fauna, the factors which control transportation by land and water — these are problems in geography which become concrete and vital in the study of industries. The correlations are so obvious that only a stupid teacher can miss them. In nature study we shall find a real place for the elements of agriculture and forestry; no longer aimless meandering in any scientific field, but definite attention to those occupations concerned with the production of materials good for food, clothing, and shelter, the conditions calculated to give best results, and the resistance which men meet in doing their work. The growing of any crop, even in a window garden, will epitomize the farmer's labors in tilling the soil, supplying plant food, utilizing light, heat, and air, overcoming disease and insect pests, and reaping his harvest. Every step takes on new meaning when the learner sees its place in the series of operations culminating in the commercial food supply of his own community, its sanitary regulation and domestic consumption. The elements of physiology and hygiene, and of physics and chemistry, are also called into requisition; they are all indispensable in fixing values of industrial products and determining economy in technical operation. What makes for hygienic living is as well worth knowing from the economic standpoint as what mechanical appliance will most increase the output. A proper study of the industries, therefore, I contend, will bring about a unified and closely correlated course in the biological and physical sciences by way of supplying the information wanted by the child in adjusting himself to the real world.

[1] *The School and Industrial Life.* By James E. Russell.

In applying these principles to the work of the schoolroom one teacher made the subject of foods center in the study of the market condition of the city in which the school was located.[1] "The study was based on the goods found in the homes of the Third Grade children. The topic of where the mothers get the foods was followed by the question as to where the storekeepers near the homes would get their supplies. Many of the children went to their grocers, and were told that they would go downtown early each morning and buy from the wholesale man and retail stores and markets." A visit to the wholesale market followed, on which visit the children found that fresh vegetables and fruits were shipped in daily from nearby farms, that meat made long journeys in refrigerator cars; that certain fruits came across the continent or even across the ocean, etc. This information naturally led out into the study of the regions or countries from which the supplies came and the conditions of soil and climate which made it possible for certain foods to be produced in one region when they could not be raised in other localities, and thus made the study of geography and nature study a natural outgrowth of the work in foods. The preparation and serving of some of the foods learned in this market study was a logical conclusion to the course and gave opportunity to learn of some of the great food industries and also of the use of certain classes of foods in the diet.

Similarly in the fifth grade of the same school the work in clothing and textiles gave opportunity for correlation with geography and nature study, history and civics, mathematics and hygiene.[2] One project is quoted to show how this correlation is accomplished.

A spool case made of blue linen was one of the gifts which the children made for their mothers at Christmas time. Some of the questions which grew out of this work and out of attempts at solution follow: (*a*) What is linen used for? (*b*) How does linen compare with cotton? (*c*) How can we tell the difference between linen and cotton? (*d*) From what is it made? (*e*) How is flax raised? (*f*) How is the fiber gotten from the stalk? (*g*) What are the by-products? (*h*) What are the manufacturing pro-

[1] *A Year's Work in Industrial Arts, Third Grade, Speyer School.* By Ida M. Bennett.

[2] *A Year's Work in Industrial Arts in the Fifth Grade, Speyer School.* By Clara Bennett Stilmar.

cesses? (*i*) How are linens whitened? (*k*) How are patterns made in linens? (*l*) What countries produce the most linen? (*m*) How does the United States rank in linen manufacture?

The questions "From what is linen made?" and "How is flax raised?" naturally tie up with the commercial and industrial geography then being studied because of the questions of soil and climate involved which make certain countries better adapted to the raising of this product than others. They also give rise to problems of arithmetic, such as, "A farmer who plants flax for the seed sows 2½ pecks to an acre, for fiber he sows 1¾ bushels per acre. What is the difference in cost of planting if flax seed is worth $1.50 per bushel? Why should there be this difference in planting?" Such a problem not only gives opportunity for applying arithmetic problems to the subject in hand but one explanation of the high cost of the linen fabric. Again the question, "What are the manufacturing processes?" gives rise not only to the discussion of the various steps in the manufacture of the fabric but leads to a consideration of conditions of workers in mills and factories, the needs for sanitary conditions in factories and workshops, and cleanliness and freedom from dust in the making of textiles and textile products.

"How does the United States rank in linen manufacture?" leads to the discussion of the following questions: "Why do we pay duties?" "Is it necessary to have such a high duty?" "If a duty is too high, is smuggling right?" "Why doesn't the United States raise its own flax?" Through all such questions and problems, habits of purposeful thinking, of weighing values and of forming judgments are being made, which if continued through later school life will go far toward producing men and women who are capable of deciding questions from the facts of the case, and who will not be swayed by their own prejudices nor the propaganda of a partisan.

2. Unification of subjects in the upper grades of the elementary school. — In the upper grades of the elementary school and increasingly so in the high school, the work becomes differentiated into the various distinct subjects of the curriculum, and the tendency too often is to shut each one off by itself as though it had

nothing to offer to nor receive from any other study. A knowledge of what instructors of other subjects are giving in their respective classes would enable the home economics teacher to build into her work such material as would help to reinforce that of the geography, history, mathematics, or any other subject being taught, and at the same time make her subject more vital and intelligible because of its appeal to the previous experience of the child. To illustrate: a certain course in the history of the United States planned for the seventh and eighth grades [1] has for one of its topics, "Effect of the industrial revolution and the new national policies." As the industrial revolution was so largely occasioned by the invention of new machinery for spinning and weaving, the teacher of Home Economics should plan to make her intensive study of the manufacture of textiles parallel to this study in history, contrasting earlier hand processes with the new machine methods so that the pupils may more thoroughly understand all the facts and conditions which led to the industrial revolution and through that understanding appreciate better some of the problems of industry to-day. Similarly, in the section of the same course devoted to agriculture, many of the topics suggested are directly related to home economics problems and should receive consideration in the food study, such as, for example, "The interest of the city as a consumer of rural products. How some of the chief products are produced and marketed. How the city's food supply is protected by legislation; for example, dairy inspection." Field trips to wholesale markets, farmers' markets, dairies, etc., would make the work doubly vital.

It is possible, however, to carry this principle of correlation too far and to weary the pupils and waste their time by the futile repetition in one course of what is being well taught in another. This is but one more argument in favor of close coöperation among the teachers in the school and thorough acquaintance on the part of each with the curriculum in all studies offered. Where such a

[1] *A Course of Study in the History of the United States, 1789–1840.* By Ernest Horn. "Teachers College Record," September, 1915.

thorough course in a contributing subject is offered, as is the case with the hygiene course as outlined in the Course of Study for the Minneapolis Public Schools,[1] the home economics teacher will need merely to recall to mind by judicious questioning the points that are especially connected with her subject, and not take the time to teach in detail the topics that have already been thoroughly taught in the other class. For instance, in that course of study the home economics studies begin in the seventh grade, and in that year in hygiene the topics of digestion, circulation, respiration, excretion, the nervous system, and the physiological effects of exercise are discussed. All of these are directly concerned with the use of food in the body, and the home economics teacher will wish to recall them at appropriate times, in order to strengthen her own work and also to make them more vital to her pupils by their concrete application in her particular field. It would not be necessary, however, for her to consider them in great detail nor spend much time on the general principles involved, but rather to clarify the subjects through their specific applications.

It has not been the custom in the past to introduce science work other than the nature study and geography of the early elementary grades, before the first year of high school or the ninth year. As a very large per cent of the pupils never enter high school, large numbers leave school with little or no knowledge of the physical world by which they are surrounded. There seems no valid reason why these subjects should not form a part of the instruction of the seventh and eighth grades, and it has been recommended that such studies be introduced into grades 7 to 9 under the general title of "Introduction to Science, with special subdivisions of hygienic and chemico-physical study," and further recommended that the studies should be scientific, although not science in the strict sense. That is, they should follow methods of science, but not its characteristic generalizations.

If the home economics teacher has the proper preparation, this introduction to science may well form an integral part of the home economics course, and its applications and illustrations may well

[1] *Course of Study for the Minneapolis Public Schools, 1913–1914.*

be taken from that field, thus making for economy of time as well as for a surer understanding of the principles.

*In the high school.* — Valuable as is correlation in the elementary school it is perhaps in the high school that the principle finds its greatest justification. It requires close coöperation among the several departments and instructors to work out a course of study that will make provision for this cross connection, and too frequently this coöperation is not found, as the following quotation shows. "In one school the question put a teacher of physics, 'How do you coördinate your work with domestic science?' was answered, 'I don't believe in coördination. If you teach physics, teach physics; if you teach chemistry, teach chemistry.' 'But why not economize the pupil's time and energy, get him along faster by teaching some of the principles of both through familiar domestic events?' He pronounced sentence against himself by replying, 'Because I have noticed that children never remember in one department what they learned in some other.' The reply is a text for a volume of commentary on public schools in their relation to citizenship." [1]

1. Science and Home Economics. — Much of the science work that has been required of girls in the past has not appealed to the pupils as worth while. The physics and chemistry of high school and college have been planned from the standpoint of the needs of the boy, and applications have been made to the devices and appliances of interest in a man's world, but with little or no use in a woman's.

The sciences offer particularly rich opportunities for correlation, and many of the underlying principles on which the home economics subjects are based may be made more clear and forceful by appropriate exercises in the science laboratory, while at the same time the sciences themselves become more vital through their association with subjects that have such immediate and concrete interests. To illustrate, — the laws of heat may as well be ex-

[1] *Studies of the Present Teaching of Hygiene through Domestic Science and through Nature Study.* Reprinted from the Bulletin of the American Academy of Medicine.

emplified in the lighting of the kitchen fire or the heating of the house as in the study of the steam engine; the life history of bacteria gained through the preservation of food as through the pathogenic study of disease; and the nature of acids determined in the removal of rusts as well as through the reaction of potassium oxalate with ferric chloride.

In discussing the question of general science in the high school, Mr. Fred D. Barber of the Illinois State Normal University [1] says:

> The mastery of some two or three hundred abstract laws, together with the solving of several hundred mathematical problems and the performing of fifty or more generally non-significant laboratory exercises is usually recognized as the sum total of an adequate high school course in physics. Such a course has been the bane of life and the Waterloo of thousands if not millions of perfectly normal high school girls. Their frantic effort to surmount this obstacle to their goal, graduation, is pathetic. But who will say that the average girl cannot be interested in and led to appreciate and understand the essential principles of that most difficult portion of physics, mechanics, when we see her sitting confidently at the steering wheel of the family car safely guiding it through the crowded thoroughfare of the city? The fact is that she is easily capable of intense interest in gears, in revolutions per minute and in differentials as well as in proper mixtures, induction coils, magnetos, spark plugs and storage batteries, provided these be taught, not as abstractions but as vital parts of the car she drives.
>
> But the question arises, Just how is this reorganization of science upon the principles of developing the essential laws and principles out of a study of applied science to be effected? Or again, Is it possible to organize science materials, while following such a plan, into logical units of instruction having educational value?

Mr. Barber then suggests a scheme of organization for first year science based on experiences with which the children come in contact in their everyday life.

Such courses are given in some high schools, notably the William Penn High School in Philadelphia, the Brookline High School, Brookline, Massachusetts, and the Horace Mann School, New York City.

In a recent report of the "Committee on Correlation of Chemistry

[1] *Fundamental Considerations in the Reorganization of High School Science.* By Fred D. Barber. "General Science Quarterly," January, 1917.

and Home Economics in High Schools" [1] which was appointed by the Central Association of Science and Mathematics Teachers, the committee says in part, "The so-called 'Household Chemistry' courses which have been offered have been chiefly a series of tests on foods and textiles, teaching few of the fundamental principles of chemistry, and making little intellectual demand upon the minds of the students."

This committee suggests a course which in its judgment would be suited to third year high school pupils and which would have in mind the particular needs of the home economics students, recommending "that the work in chemistry be planned to correlate as closely as possible in subject-matter and in time with the study of foods." They further observe, "In this outline the distinction between organic and inorganic chemistry has been disregarded. This may seem a radical step, but since such a division is chiefly historical, it does not seem sufficient reason for holding to the conventional sequence of subjects now found in most textbooks of chemistry, especially since it has not met our needs."

Where it is desired to give a more intensive course in any of the other sciences than is included in the general science course, the same principles should apply, namely, that each science should be taught from its concrete applications to particular uses and situations of immediate need.

2. Mathematics and Home Economics. — Perhaps the possibilities of correlation with the natural and physical sciences have been more readily seen and more widely applied than have those of other subjects in the curriculum which find equal opportunity for application in the home. From an economic point of view perhaps there is no subject in which the high school student in Home Economics should be more proficient than in practical mathematics. So much of the success and happiness of the home is dependent upon the wise expenditure of the income that every effort should be made to see that our girls thoroughly understand the value of the dollar, the dime, and the penny, and perhaps there

[1] *Report of the Committee on Correlation of Chemistry and Home Economics in High Schools.* "Home Economics Journal," March, 1917.

is no way in which it can be so effectively taught as through actual calculations in the purchasing power and percentage of loss or saving in certain typical transactions.

Such a course in household arithmetic has been successfully tried out in the Plainfield, New Jersey, High School.[1]

The arrangement of the course on this scheme gives abundant opportunity for repeated drill on fundamental arithmetical problems, reinforces the teaching of the home economics teacher through actual concrete examples of transactions and typical calculations, and also saves the time of that teacher for the more thorough drill on her own subjects. Particularly is this true in the calculation of dietaries, especially if this section of the mathematics teaching be given parallel with or just preceding the dietetics course in Home Economics.

3. Art and Home Economics. — It must not be inferred from the above discussions and quotations that the foods, sanitation, and management phases of the home economics work are the only ones that offer opportunity for correlations, for such is not the case. There are just as many opportunities for strengthening and enriching the clothing and textile courses by properly related work in the other high school subjects. To quote from a recent article,[2]

> Clothing is a subject that can easily be brought into close correlation with almost every subject in a school curriculum; in fact, it involves many subjects as a part of itself. Yet in many schools none of this interrelation is made evident, and the teaching of seams and garments is the sum total of the sewing courses; not even the materials and the cost form any part of the definite work.
>
> The history of clothing is as fascinating as it is profitable, and through its study we realize how fashions are influenced by the political conditions in a country. The history of a country, in its making, sways the fashions.
>
> Physics is related to the study of clothing, since it is important in discussing protective power against heat, cold and moisture, and in connection with mechanical apparatus, such as sewing machines, shears, irons, and

[1] *Household Arts Arithmetic.* By Katharine F. Ball and Miriam E. West. "School Review," Vol. XXV, No. 10, December, 1917. See also *Mathematics Applied to the Household Arts.* By Katharine F. Ball. "Home Economics Journal," October, 1916.

[2] *Courses in Sewing for Elementary and High School and their Correlation with Drawing.* By Martha H. French. "Home Economics Journal," February, 1917.

mechanical testing devices. The examination of fabrics and textile fibers with microscope involves optics. Chemistry is related through the action of cleaning reagents upon the various textile fibers and the chemical methods for testing textiles. Physiology and hygiene teach one what to wear in order that the body may be properly protected and at the same time muscular movements, body development, and normal body functions be unrestricted. Languages may be useful for historical books on costume; but most necessary of all these subjects, and underlying all sewing, should be drawing and design. Where there is no correlation with the art work three reasons usually explain this lack: first, the sewing teachers know so little of the principles and mediums of the artist that they cannot suggest correlation; second, the art teachers know so little of the principles and mediums used in sewing that they in turn cannot suggest means for unifying the work; and third, neither instructor is willing to make the necessary concessions to bring the two subjects closer together, nor does either care to give the time and effort required to develop successfully a series of lessons which shall be sequential both in sewing and in art.

Miss Lura R. Crawford, director of the department of Applied Design in Domestic Art in the Dickenson High School in Jersey City, New Jersey, has been particularly successful in her costume design work in that high school. She believes in the necessity of knowledge of the principles of sewing and dressmaking on the part of the art teacher as a qualification for success in the field of dress design, and one secret of her highly successful course is that she thought it sufficiently worth while to acquaint herself thoroughly with those principles of construction which were of immediate need to make her art work practical and intelligible.

But the art work should not be entirely confined to the clothing work of the home economics course. Its principles find just as wide application in the field of home furnishing and decoration as in costume design. The Los Angeles High School's course in home furnishing and decoration "takes up the problem of the decoration and furnishing of the entire house. It deals with color schemes, cost of materials, kinds of materials used, economic and artistic values, and estimates for specific problems; visits to decorating shops will be included."

4. Social science and Home Economics. — Important as are all the subjects discussed in their relationship to the home economics studies they are of less importance than the understanding of the

human relationships that exist in connection with the subject, for Home Economics after all is distinctively the study of human relationships. When we stop to think of the number of hands through which our food has passed before it reaches our breakfast table, of the number of overspeeded men and women who perhaps contributed to the making of the garments we are wearing, of the number of exploited children who may have been engaged in the preparation of many of our articles of consumption; of the temptation to adulterate food or fabrics we may have brought upon manufacturers by our uninformed demands for cheaper materials, we can readily appreciate how closely we are bound up with others in one big web of mutual responsibility. Our high school girls are old enough to appreciate this interrelationship, and it should be brought before them in some very definite and concrete way before they leave.

One of the best ways, perhaps, is in connection with the civics and economics courses of the high school, preferably in the senior year.

In the bulletin on the social studies in secondary education published by the Bureau of Education [1] the following statements are made. "It is generally agreed that there should be a culminating course of social study in the last year of the high school, with the purpose of giving a more definite, comprehensive and deeper knowledge of some of the vital problems of social life, and thus of securing a more intelligent and active citizenship."

The conflicting claims of the various social sciences — economic, sociologic, and political — are then presented and the conclusion reached that "the only feasible way the committee can see by which to satisfy in reasonable measure the demands of the several social sciences, while maintaining due regard for the requirements of secondary education, is to organize instruction, not on the basis of the formal social sciences, but on the basis of concrete problems of vital importance to society and of immediate interest to the pupil."

[1] *The Social Studies in Secondary Education.* Bureau of Education, Bulletin No. 28, 1916.

By way of illustration is given the following:

In actual life, whether as high school pupils or as adults, we face problems or conditions and not sciences. We use sciences, however, to interpret our problems and conditions. Furthermore, every problem or condition has many sides and may involve the use of various sciences. To illustrate the point we may take the cost of living, which is a vital problem from the standpoint of the individual and of society, and may readily have been forced upon the interest of the pupil through changes in mode of life, curtailment of allowance, sacrifice of customary pleasures, change in plans for education, etc. This problem involves, on the economic side, such fundamental matters as values, prices, wages, etc.; on the sociological side, such matters as standards of living, birth-rate, etc.; on the political side, such matters as tariff legislation, control of trusts and the like, and the appropriate machinery of legislation, law enforcement, and judicial procedure.

It is readily seen that many of the questions that would come up in the discussion or study of such topics would be directly connected with problems of the home and so would be of interest to the home economics students and should be tied up with topics in that course.

In the Brookline High School [1] a list of study topics is suggested which is intended to connect the work in economics with that in Home Economics. Under the head of "Study topics belonging to Political Economy and Home Economics" the following topics are suggested:

The consumption of wealth. Food and its relation to labor power. The housing of the poor and its relation to good citizenship. Municipal sanitary regulations. Expenditure *versus* saving. Division of income. Domestic service (as a part of the general labor problem). The work of superintending a home compared with other economic operations. Child labor. Pure food.

Many more examples of this principle of correlation might be cited, but enough have been given to make the meaning clear and to emphasize its importance. Particular applications must be made by each teacher among the subjects available in her own particular school, and when once the principle is accepted, the alert teacher will find many places for its application.

[1] *Courses in Domestic Science offered by the High School, Brookline, Massachusetts, 1912.*

## SUGGESTIONS FOR STUDY AND REVIEW

1. Take the course of study of your school and see what subjects other than your own have to offer to your subject and where your subject may help to reinforce others in the curriculum.

2. Ask at least one teacher to coöperate with you in trying out a scheme of correlation for a term and see if your work gains anything by the experiment.

3. If you teach all of the subjects in a certain grade, work out a limited scheme of correlation and try it out for a term.

4. What is the most important industry or industries in your neighborhood? Have they anything to offer as a means of unifying the work of your grade?

5. One teacher based much of the work of the fourth grade on a cotton glove industry that was located in the town. What would she find in that study besides the processes of manufacture?

6. What is your status in your school as a home economics teacher? Is there any way in which you can form more vital relationships with the school organization?

7. Indicate six projects connected with home-making that might be worked out in the science laboratory under the direction of the science teacher. Do the same for the art teacher.

8. What civic or social problems are now under discussion in your town that are vitally connected with your work and should find a place in the discussions in your classes?

## REFERENCES FOR COLLATERAL READING

The School and Industrial Life. Russell and Bonser.

Democracy and Education. Dewey.

School and Society. Dewey.

Schools of To-morrow. Dewey.

Principles Underlying the Making of School Curriculum. McMurry. Teachers College Record, September, 1915.

Household Arts Arithmetic. Ball and West, School Review, Vol. XXV, No. 10, December, 1917.

The Application of Art Principles to Dressmaking. Crawford. Proceedings of the Eastern Arts Association, April, 1917.

The Social Studies in Secondary Education. Bureau of Education, Bulletin No. 28, 1916.

# PART II

## ORGANIZATION OF COURSES OF STUDY IN HOME ECONOMICS

## CHAPTER V

## VARIOUS SCHEMES OF ORGANIZATION OF THE ELEMENTARY AND HIGH SCHOOLS

I. Introduction.
   A. The adjustment of school organization to the demands of the democratic community.
II. The elementary school.
   A. Its aims and purposes.
   B. Various lengths of elementary school period under different schemes of school organization.
III. The high school.
   A. Its scope.
   B. Its aims and purposes.
IV. The rural school.
   A. Its special forms of organization.

**Introduction.** — One of the very hopeful signs of the times in school administration is the departure from the tradition which made all elementary school courses eight years, and all high school courses four years in length. With much the same spirit with which the world is striving to make the world safe for democracy and democracy safe for the world, educators are undertaking to reconcile the interests of pupils and the subject matter, methods, and organization of the school system.

In many instances the readjustment is not extreme. For many years progressive education has attempted to utilize the foremost interests of the child in building up the content of the curriculum, and to organize them into a general scheme which is closely related to the present-day life of the child. Schools have developed which serve the interests of all types of people and community needs; but it remains for the education of the future to give equal social value to practical and academic education.

In *Schools of To-morrow*, Dr. John Dewey enjoins the public school system to assume the responsibility of democratizing all classes of people.[1]

Two concrete schemes for accomplishing these desirable results have been introduced into some of the public school systems of the country.

I. The reorganization of the division into elementary and high school work, in order that differentiation in interests may early be recognized and turned to account.

II. The establishment of elastic courses of study in high schools which will serve the needs of all types of pupils.

**The elementary school.** — *Its aims and purposes.* — In the light of modern educational theory, "the term elementary school is here used to cover that period in education in which the work should be common for all children without reference to sex, future vocation, or social status. It is the period for securing that common information, experience and development necessary to intelligent living in any walk or calling of life." [2]

The problem of maintaining democracy in the elementary school is not difficult. When interests are naturally uniform because of

[1] It is fatal for a democracy to permit the formation of fixed classes.

. . . . . .

There must not be one system for the children of parents who have more leisure and another for the children of those who are wage-earners. The physical separation forced by such a scheme, while unfavorable to the development of a proper mutual sympathy, is the least of its evils. Worse is the fact that the over-bookish education for some and the over-"practical" education for others brings about a division of mental and moral habits, ideals and outlook.

The academic education turns out future citizens with no sympathy for work done with the hands, and with absolutely no training for understanding the most serious of present-day social and political difficulties. The trade training will turn out future workers who may have greater immediate skill than they would have had without their training, but who have no enlargement of mind, no insight into the scientific and social significance of the work they do, no education which assists them in finding their way on or in making their own adjustments. A division of the public school system into one part which pursues traditional methods, with incidental improvements, and another which deals with those who are to go into manual labor, means a plan of social predestination totally foreign to the spirit of democracy. . . .

[2] *The Industrial Arts in the Elementary School.* By Frederick G. Bonser. "School Arts Magazine," November, 1913.

their universality, the task is obviously simple. It is with the differentiation of interests and training that the problem presents itself for solution.

The complexities of modern life have thrust more and more responsibilities upon the school. As was stated in Part I, Chapter I, the home and community have gradually changed in their power as educational forces. The school has, as a result, been called upon to supplement more of the general education in the life of the child. In addition to the "tools of learning," the schools have become responsible for "useful information, desirable habits of mind and action, cultivated taste and appreciation, and attitudes of social helpfulness, all so developed that they guide in the conduct of life."

*Various lengths of elementary school period under different schemes of school organization.* — Until a comparatively short time ago the elementary school was generally accepted as an eight-year period. Differentiation in method, subject matter, and interest might be considered during the upper years of the elementary school, but the spirit of the lower school dominated the work.

In many school systems, "departmental work" and Home Economics and shop work as a share of general education gave acknowledgment to the evident need for adaptation to changing interests and needs in the girl and boy. However, the graduation from the elementary school at the end of the eighth grade was made a "feature" in education; it came normally at about the age of 14 years; white dresses, duck trousers, and diplomas made the event a too natural "commencement" upon the duties of life.

Furthermore, the high school which followed offered little inducement to the practical-minded youth to enter its doors for a four-year period which gave little training for the lives which lay before him.

With the growing conviction that the elements of education if wisely planned and presented could be achieved in six years instead of eight; and with the knowledge that at the end of the sixth year there comes a natural change in the physical and mental makeup of the girl and boy, the adherence to tradition was broken, and various school systems reorganized their elementary and secondary

school schemes upon the new basis, *e.g.* six years for the elementary and six years for the high school.

In schools located in a community where economic conditions demand the early entrance of children into industry, differentiation of work for boys and girls may be introduced into the sixth grade; in this way children of over-age in the sixth grade may be given the fundamental working principles of the practical arts for general education, before leaving school at the legal age.

As a means of "bridging the chasm" between the elementary and high school, and thus insuring a longer school lifetime for all pupils, Mr. Herbert S. Weet, Superintendent of the Rochester Public Schools, New York, thus bears testimony for the efficacy of the 6-3-3 plan of education:[1]

> Of those who completed the eight-years work last January under the Junior High School organization 94½% have remained for the ninth year work. A year ago in exactly the same community, but under the grammar school organization, only 51% remained for ninth year work. This highly suggests that there were needs among these upper grade pupils that were not being met and that the present Junior High School type of work is meeting these needs.

The old-time uniformity in subject matter and method for all is a thing of the past. In the progressive school of to-day each child is encouraged to achieve these "tools of learning" through his own peculiar interests and capabilities.

**The high school.** — *Its scope.* — With the widening conception of the right of every individual to be educated for the life work which he anticipates, secondary education has extended its field to cover all types of schools which immediately follow the elementary school training. It is held by some that all types of pre-collegiate education, offered to adults, even though it be the acquisition of the fundamentals of learning, are forms of secondary education.

Listed, they may thus be designated:

1. All regularly organized high schools.
2. Trade or vocational schools.

[1] *Educational Administration and Supervision*, September, 1916.

3. Part-time schools.
4. Continuation classes.

*Its aims and purposes.* — In a bulletin published by the Grand Rapids High Schools for the information and guidance of incoming students and their parents, the following statement appears:

It is the aim of the Junior and Senior High Schools through the studies offered and the student life that is encouraged to develop the moral, physical, and intellectual well-being of all pupils. The attempt is made to lead the growing youth through the storm and stress period of adolescence into the maturer years of young manhood and womanhood. Incidentally every effort is made to lead each pupil to a wise choice of a career and to prepare himself for his best service to humanity in his vocation and as an intelligent, loyal citizen.

. . . . . .

The rapid growth of high schools in the United States during the past fifteen years is in itself proof of the fact that the great mass of the people in our country are realizing the importance and value of their training. The time has come when no boy or girl can afford to go out into the world to battle with life without the preparation that may be secured at the hands of the public in the high school.

Secondary education aims (1) to provide liberal education for all as a basis for the highest type of "moral, physical and intellectual well-being," and for intelligent, loyal citizenship. (2) To provide specialized training, both academic and vocational, to meet the demands of all types of people, in preparation for their "best service to humanity" in their vocations.

The present plastic condition of the high school curriculum is encouraging evidence of the response of the educational world to the demands of democracy. Because of the lack of uniformity in organization and curriculums of American high schools to-day it is practically impossible to classify them. However, it may be said that there are two lines of readjustment in secondary school administration which may be noted as indicative of advancement:

(1) The creation of suitable curriculums and types of schools designed to meet the demands of varying interests and anticipated vocations of pupils (as already suggested), and (2) the varying lengths of elementary and high school courses, designed to promote

school attendance to its optimum achievement, thus increasing the sum total of universal education.

It would be impossible to offer a complete list of the existing types of courses and curriculums in modern secondary education. Suffice it to say that modern education bases its procedure in school organization upon a careful survey of pupil and community needs, and of community opportunities.[1]

In relation to the adjustment of the length of elementary and high school courses to the demands of democracy it may be said that there is an increasing tendency throughout the country to reduce the time devoted to the acquisition of the "fundamentals" to six years; and to include the seventh and eighth years of school training in the secondary school course. In this organization, commonly known as the "6–3–3 scheme," the high school course is subdivided into the Junior High School including the seventh, eighth, and ninth years, and the Senior High School including the tenth, eleventh, and twelfth years.

There are various modifications of this scheme of organization. Some schools include seven years in the elementary school and five in the high school, and occasionally only four years in the high school. Other adjustments occur in the subdivision of the high school course into "2–4," and "4–2" cycles. Occasionally two years of college work are added to the high school course, and college credit given, making the 8–4–2 scheme of organization.

**The rural school.** — *Its special forms of organization.* — The rural school, because of its segregation, its limited teaching force, and its responsibility to pupils and community for all the types of training, has a peculiarly difficult problem to solve. In many cases the rural high school has evolved through the addition of high school subjects to the elementary school subjects as the demand arose. Another development has been the combination of two or more advanced district schools which have perhaps out-

[1] Helpful references in relation to various types of schools and courses are:
(1) *Principles of Secondary Education.* Monroe. Chapter V. Published by Macmillan Co.
(2) *Vocational Secondary Education.* Bulletin No. 21, 1916, Department of the Interior, Bureau of Education.

grown the building and equipment of the elementary school where they were first established.

Between the one-room rural school and the consolidated high school which is fed by the output of the numerous surrounding schools there is a wide difference in the ability to meet the present-day demand for adaptation of courses and subject matter to meet the needs of pupils. There is comfort in the remark made by the dean of the college of education of one of our largest universities that "during his boyhood on the farm he had but three months in the year of schooling, which left nine months for him to get an education." [1]

Although there has been a smaller number of courses offered in the rural than in the city high schools, there is a growing tendency, parallel to the aroused interest in rural education, to introduce courses of a practical nature. There has been a modification of courses and methods of instruction in the sciences, and the addition of courses in Home Economics, dairying, horticulture, agriculture, etc., as demanded by the individual community.

A feature found in some rural communities is the two-year high school course. Such schools are to be found in the Mississippi valley; and California offers financial encouragement to its "grammar-high" schools.

The prospects for the development of rural education are bright; and there is no doubt that the consolidated rural school offers a fertile field for the promotion of most advanced educational thought.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Discuss the advantages and disadvantages of the "6–3–3" plan of organization for the schools of the community which you know best.
2. Suggest concrete opportunities for the schools to further the highest ideals of democracy by means of their organization.
3. What do you consider the most effective "tools of education" which you mastered during your elementary school training?
4. Why did the "Three R's" more fully meet the needs of our grandfathers' school training than they do ours?

[1] *Education, the Mastery of the Arts of Life.* By Arthur E. Mason. "Atlantic Monthly," March, 1918.

5. What agencies have contributed to your education?

6. List the vocations open to girls and women for which the democratic high school should provide vocational or prevocational training.

## REFERENCES FOR COLLATERAL READING

The American High School. Brown.
Schools of To-morrow. Dewey.
The Education of To-morrow. Weeks.
Report of Committee on the Junior High School, presented to the High School Masters' Club of Massachusetts. March 17, 1917.
Educational Administration and Supervision. November, 1915, and September, 1916.
Problems of Educational Readjustment. Snedden.
A Modern School. Hanus.
Principles of Secondary Education. Monroe.

## CHAPTER VI

## HOME ECONOMICS IN THE ELEMENTARY SCHOOL

I. Relation of the home economics studies to the work of the first six grades.
   A. Industrial arts as a form of organization.
   B. Other schemes of organization.
   C. Summary.
II. Home Economics in the seventh and eighth grades.
   A. The aims.
   B. The necessity for understanding the needs of the girls.
   C. The time allowance.
   D. The scope of the work.
   E. Bases for the organization of courses in Home Economics.
   F. Home economics studies for the seventh grade.
   G. Home economics studies for the eighth grade.

**Relation of the home economics studies to the work of the first six grades.** — It has been stated in the foregoing chapter that the aim of the elementary school is to "give that common information, experience, and development necessary to intelligent living in any walk or calling of life." Obviously there are many subjects that can justly lay claim to consideration on these grounds, and as the claim of each has been recognized and each has been added to the curriculum of the school, the program has become more and more crowded and the work become more and more superficial and formal.

For the past few years educators have been occupied in trying to determine the subjects of most worth, and in bringing about some sort of unity among those chosen, to the end that they may become a coherent and unified body of subject matter in the minds of the pupils and not merely a number of isolated and unrelated topics of little practical worth.

*Industrial arts as a form of organization.*— Of the attempts that are being made to-day to simplify and unify the elementary school curriculum, one that is rapidly coming into favor and use is that of the industrial arts.

1. Definition. — This subject is, as one writer puts it, "a study of the industries by which we are provided with food, clothing, shelter, and other necessities of life," or "a study of the processes by which man transforms the raw materials about him into finished products of higher value to satisfy his needs." Six units of subject matter are usually included in the subject of industrial arts, these being considered the most important and typical of those industries contributing to the needs and well-being of man. These are "how the race provides itself with (1) food, (2) clothing, (3) shelter, (4) utensils, (5) means of recording thought, and (6) facilities for doing the world's work. These six units represent merely an arbitrary division designed to help us in organizing the subject."[1]

2. Values. — The reasons for choosing for all children such a subject as industrial arts, which is really the study of manufacturing, when the great majority of them will never be engaged in any form of the production of commodities, may well be questioned, and in answer to such a question Dr. Frederick G. Bonser gives the following explanation as to the values of industrial arts:[2]

A study of the industries or industrial arts in the elementary school is of greater importance than ever before, because of the concentration of industries in factories and shops, away from the home and everyday life of our time. Te information and attitudes desirable about the making of our clothing, furniture, shelter, foods, and other products were once gotten by children in their own homes and through their own participation. But to-day, if this experience is to be had at all, it must be gotten through the school.

VALUES: INFORMATION. — The proper study of industrial arts should give values of three kinds, namely, information, appreciation, and habits and attitudes. The information most immediately valuable is that which makes one intelligent about industrial products from the standpoint of the

[1] *Industrial Arts for the First Six Grades.* By Sara L. Patrick. "Proceedings of the Eastern Arts Association," 1917.

[2] *Teaching the Elementary School Subjects.* By L. W. Rapeer.

consumer. We all have to select and purchase clothing, but few have to make it. The information all need about clothing is that of economic values, health qualities, appropriateness of various kinds of clothing to various purposes and occasions, and the proper care of clothing. To get this information we must learn something of the various processes in the making of fabrics — spinning, weaving, dyeing, designing, and finishing. We must know the various methods of adulterations, so that we can detect shoddy and other inferior goods. We must know the several tests by which to identify each particular textile material — cotton, wool, linen, and silk. All of these facts help us to judge of values in buying clothing or clothing materials. For furniture, the problem is also one of buying rather than making, for most people. To buy intelligently, we must know the kinds of wood used in furniture, together with their desirability and proper cost. We must know as well the various types of construction — which are substantial and durable and which are not. Many of the problems about foods are also those of food values and cost values — matters of information that help us to purchase and use foods wisely and economically.

APPRECIATIONS. — The second value for the study, that of appreciations, has to do with the cultivation of taste. We desire to train children to know good standards of form in all products and to like these. We want them to know good design in all its elements, so that they will be able to select furniture, clothing, china, rugs, wall-papers, and all other material products, so that these will be beautiful and in harmony with their purposes. School work should lead the children to know when things are beautiful by all good standards, to like that which is beautiful, and be influenced in their choices by this work.

HABITS AND ATTITUDES. — The third value, that of habits and attitudes, comes as a kind of by-product of the proper emphasis of the other values. The attitude of carefully considering everything made or purchased from the standpoint of its economic value and its qualities of design or beauty naturally results from a consideration of these points in every problem taken up in the school. To avoid the waste of money, to get thoroughly good qualities, to secure designs that are excellent and permanent, is an attitude of very great worth to both men and women. The habits of thoroughness, of carefulness in workmanship, and of thinking a problem through before beginning its execution, are all inherent in the study of industrial arts.

A further and more largely social kind of information, of attitudes, and of appreciations is also included in a study of *present-day industries*. We should all know something of the factory system of to-day, the large amount of automatic machine production, the kinds of work each worker does, the surroundings of workers as to health, moral conditions, wages, and the relationships of the worker and the employer, the risks of limb and life, and such other questions as enable us to act intelligently as citizens. When we find sweat-shop conditions in an industry, we should be able to do something to help its workers. This we may do by buying from those producers only who have good conditions and pay living wages, and by helping to pass and enforce laws abolishing improper conditions. Our study of the

industry should provide us the information, and cultivate in us the appreciations and attitudes of mind toward the workers in industry, which will help us to be just to them and aid, as good citizens, in making their conditions of work and life wholesome and happy.

In addition to these values the industrial arts as suggested in a previous chapter serve as a means of binding the curriculum into one well-organized, unified whole, as all other subjects may most naturally grow out of or be bound to the study of the industries.

3. Subject matter and organization. — In this book we are concerned primarily with industrial arts in its relation to Home Economics, therefore only those phases which have direct bearing on home economics subjects will be discussed. With at least three of the units, — food, clothing, and shelter, — the home economics teacher is directly concerned and she is frequently asked to assist in planning the courses in those subjects for the first six grades even if she does not teach them. In the first two or three grades the work naturally centers around the activities that the children have been accustomed to see carried on in the home or immediate neighborhood; and with this beginning it is an easy step to a study of primitive conditions, where simple processes of the conversion of raw materials into commercial products may be made and become the basis for the understanding of the more complicated methods of manufacture in higher grades.

The doll house makes a natural center for much of the work of the first and possibly of the second grade. Typifying the home to the children it easily suggests reproducing the setting of the home and leads to the building of the house, the painting and papering of the rooms and the making of furniture, curtains, rugs, bedding, etc., with which the home is furnished. Providing a family to live in the home naturally brings the dressing of dolls with its accompanying discussion of clothing suitable to the season and the making of garments for the doll family.

Activities carried on within the home quickly suggest themselves and the children eagerly reproduce those activities, — sweeping and dusting the rooms, washing and ironing the bedding and clothing of the doll family, setting the table and having a party.

The latter gives opportunity for a study of the foods found on the tables at home or in the grocery store near by and develops into the preparation of some simple food, cookies for the party, a vegetable from the class garden, if the school is fortunate enough to have a garden, or cranberry jelly at the holiday season. The preparation of the dish is accompanied by a study of where the particular food comes from, how it is grown and how it gets to us, just as in clothing some knowledge is gained of the materials from which the doll clothes are made and where these materials come from.

From the familiar field of the home or neighborhood life it is an easy step to primitive conditions to which the children may be led through stories and pictures. These conditions are introduced not so much for an understanding of that period of development as for giving a basis for the interpretation of complex modern conditions and industries. When it is considered that modern manufacturing is but an elaboration of the simple processes practiced for ages back it will be seen that in the light of these primitive methods the complicated industries may later be easily grasped and appreciated. For instance, modern milling with its elaborate processes for crushing the grain and separating it into its many different grades accomplishes in the end just what did the Indian squaw with her two stones for grinding and her woven basket for separating the coarser particles from the finer. Likewise the modern spinning industry but disentangles, draws out, lays parallel, and twists the fibers into thread as did primitive woman with her spindle, distaff, and fingers.

As the children gain in experience and pass from grade to grade these modern methods are gradually developed till by the time they reach the fifth or sixth grade they are ready for a serious and fairly comprehensive study of the conditions of modern industry and are able to appreciate many of the problems arising in connection with present-day methods.

The work should be given to boys and girls alike, for in respect to fundamental necessities boys personally have as much need as girls. Likewise from the social aspects of the work both boys and

girls need a sympathetic understanding of the perplexing problem of industrial conditions in order to take an intelligent part in the society in which they must live.

The following outline is quoted to show the possibilities in the second grade for the execution of such a project in shelter as has been discussed above:[1]

*Shelter:*

1. Making a simple house form with a frame of wood covered with burlap, containing a door and window, using mica for window-panes; the top of roof is left open; the parts are in panels and are easily folded; the wall of the classroom may be used as one side of the house.
2. Furniture for the house, table, chairs, buffet, bed, bureau, and book-case — made in simple style of wood by screw construction; each piece is made by two or more children working together.
3. Housewifery, using the house and furniture made. (*a*) Care of dining-room: sweeping, dusting, setting of table, washing dishes and laundering linen. (*b*) Care of bedroom: sweeping, dusting, making of bed, laundering of bed-linen.

Likewise the possibilities of a textile problem are illustrated by the following project quoted from the course of study for the third grades of the Richmond public schools:

Subject matter: Textiles. Correlate with related topics in geography, history and literature.

1. Identification of wool, cotton, silk and linen fabrics. Have pupils bring samples from home.
2. Classification into vegetable and animal fibers.
3. Study of wool:
   - *a.* Sheep raising: Other wool-bearing animals.
   - *b.* Washing, shearing and carding.
   - *c.* Kinds of wool.
   - *d.* Structure of fiber: Its quality and limitations.
4. Textile processes:
   - *a.* Spinning:
     - (1) Primitive methods: Wheel and spindle.
     - (2) Modern methods: Use of machinery.
   - *b.* Weaving:
     - (1) Primitive methods: Indian loom with heddle; Colonial loom.
     - (2) Modern methods: Machinery.
5. Uses: Clothing, blankets, rugs.

[1] Quoted from *Education for the Home*, Part I. Andrews.

6. Excursions:
   a. Observe demonstration of primitive methods of spinning, if possible.
   b. Observe demonstration of loom weaving in special classes.
   c. Visit museums to see specimens of weaving by primitive peoples.

4. As a basis for home economics work of seventh and eighth grades. — As the work progresses from grade to grade it becomes increasingly intensive and complex. Having started with the narrow home environment so as to make the transition from home to school an easy one and having carried through many of the primitive processes involved in textile manufacture and food preparation, the children are now ready to widen their interests and broaden their horizons. The industrial arts work naturally becomes connected with the history and industrial geography studies of the upper grades, and customs and lives of peoples of other lands, their costumes and food products become the center of interest. Questions such as "What do these countries contribute to our food supply?" "Why are we dependent upon foreign countries for most of our textile fibers?" "From what countries in particular do we obtain certain foods or textile fabrics?" lead to an understanding of the interdependence of countries and the conditions of climate, soil, or labor, etc., which make it possible for one country to produce commodities economically when others cannot. Also, as the work progresses, it should be organized into longer units more consistent with home conditions, so that an appreciation of the work of the home may be gained and a good foundation for the home economics work of the seventh and eighth grades be laid.

Taking food as an instance, the work of food preparation in the first three or four grades is largely for the sake of illustrating industrial processes. Wheat and corn are ground into meal for the sake of learning the processes involved in the manufacture of our flour and corn-meal, and their conversion into muffins or bread is for the sake of showing the use of the product as food. By the time the fifth or sixth grade is reached, however, the children are ready to undertake a more serious study of food, its composition, preparation, and use in the body; and the foods that are selected should be those which are not only typical products of the countries studied, but

also those typical of the uses of foods in the body, and which may by proper selection give an elementary idea of balance in diet and combination in a meal. To show the working out of such a problem the following is quoted as typical of fifth grade work:[1]

The work with foods was carried on largely in the cooking, geography and arithmetic classes. In our geography we studied the phases related to the production, manufacture, and transportation of the products. The cooking dealt largely with their value as food, and the children learned how to prepare them nutritiously and economically. They also became acquainted with the main food elements: protein, fat, carbohydrates, water, and mineral matter. In the arithmetic various quantitative relations were worked out. In order to handle much of the data it was necessary to understand decimals, so this work presented a reason for their study. . . .

In the fifth grade we took as our problem in relation to the study of our own city: "Why is New York City so important?" The children with little help developed the reasons for this, emphasis being given to the fine harbor and the facilities for sending the various products here for immediate use, to be worked over or to be sent away. On our journey to the farm with the rest of the school in October, we had seen some of the fall fruits and vegetables, and some corn in various stages of preparation for the market near us in New York. Some of the most important of the needs of the city for food were then listed, and the sources of supply briefly located, and the route traced. Flour, one of the most important of the many products sent to us, was taken up for special study. . . .

(*a*) Wheat Region. . . .

(*b*) Wheat Manufacturing. . . .

(*c*) Chief Milling and Shipping Centers. . . .

(*d*) Shipping Routes. . . .

(*e*) Wheat-producing Countries. . . .

(*f*) Wheat as a Food.—After working from the uses of wheat in our own homes into the big wheat industry of the United States, the question arose as to *why* wheat is such an important food. Grains of wheat were given the children and they found the part out of which bran is made. Then some flour and water were mixed together, making a dough. This dough ball was washed in water, leaving a yellowish, elastic substance. This, we told the children, was largely the gluten part of the wheat. That which was washed out was tested and found to contain starch. This experimenting was supplemented by the use of a Gold Medal Flour chart of a grain of wheat, which indicated the five bran coats, the gluten grains, the grains of starch, and the germ. The children made greatly enlarged drawings of the wheat grain, with the help of the chart, and labeled the different parts.

In these cooking lessons the children prepared cream of wheat, and white sauce, and baked bread. In connection with the first they discussed the

[1] *A Year's Work in Industrial Arts in the Fifth Grade, Speyer School.* By Clara Bennett Stilmar.

question as to why cream of wheat makes a good food. This brought in review the food elements in wheat and opened the subject of expense. The cost of a cereal for breakfast was computed in an arithmetic lesson and the result compared with the cost of meat, fish or eggs having the same value in food units. . . .

(*g*) Other Exercises Connected with the Study of Wheat. — In our Greek history it was interesting to note that wheat was one of the grains in earliest use. The class had already heard the Greek harvest myth of Demeter and Persephone. The Hawthorne version was read to them in several literature periods, and, as they were particularly interested in dramatising, they suggested playing it. About this time the date on which the fifth grade was expected to entertain the rest of the school in assembly was assigned to us, and the children at once decided to get the play ready for that occasion. The class also used short accounts of the dramatising, cooking, mapwork, and collections for the news items sent to the Speyer School weekly paper. Those whose papers were chosen for publication were quite proud to read their signed "articles" in the ambitious little sheet.

Corn, rice, potatoes, fruits, eggs, and meats were studied in a similar way, and in connection with each topic certain typical dishes were prepared in the foods laboratory.

After these experiences with foods the class planned to serve a breakfast. In selecting which dishes they would prepare, a simple "balance in diet" was kept in mind. They then learned how to set a table.

For the final preparation the class was divided into groups, each one with certain duties. Two children were voted by the class, one for "Father," the other for "Mother," and there were two invited guests. The rest took turns in serving the different courses and in helping in the kitchen.

Later the cost of the breakfast for each individual was computed.

The finding of the teacher is often an obstacle to the introduction of industrial arts. Since the work forms such a closely related whole, the ideal is to have all the work taught by the regular grade teacher. Where she has not the proper preparation, however, the home economics teacher may offer assistance or sometimes take over the work in food, clothing, and shelter, introducing it at such times as fit into the plans of the grade teacher and always in close coöperation with her.

*Other schemes of organization.* — 1. As an outgrowth of the other subjects in the curriculum. — The subject of industrial arts, however, is by no means universally taught, though quite frequently some phase of home economics work is given throughout

the elementary school or at least in the later years, grades four to six. In some schools the foods and textile work grow out of the history, science, or art work.

The Francis W. Parker School in Chicago uses this form of organization. Of the "Domestic Science" work the catalogue says:

> This department includes cooking, sewing, and home science. In every class this work is either the outgrowth of the grade's study in science or history, or itself starts a piece of investigation which is carried on in the classroom. As a result the work of the department is not isolated but is a component part of the whole year's study. For example, in the second grade the study of primitive peoples is carried into the kitchen and exemplified by simple ways of milling, of making dough, of applying heat. The fourth grade brings back wild fruits from field excursions and makes preserves, jellies, and juices. Here scientific questions arise which are taken back to the classroom and worked out there.
>
> In the early grades the simpler and more picturesque phases of the study are pursued — playing house, setting table for luncheon, washing, cooking, jelly-making, easy weaving. In the later grades the more technical side of the industries is studied — action of yeast, fermentation, food analysis, kinds of stitches, designing and drafting of garments, simple embroidery.

Sewing work is introduced as a rule when a need for it is felt, as in the making of Greek costumes, which are undertaken in connection with the study of Greek life in the third grade.

In all of the work so far discussed, the home economics lessons are introduced into the program at such times as they are needed, there being no regular time each day or week that is especially devoted to that phase of work. This demands adaptability and flexibility on the part of the teachers, but is ideal from the point of view of the effectiveness of the work, which can then be introduced at the time when it will be most valuable for purposes of illustration and for reinforcing or clarifying the work in hand.

2. As an organized study in certain of the first six grades. — At other times the home economics work is definitely organized as such and is taught as a distinct subject in some of the elementary grades, seldom beginning earlier than the fourth and continuing through to the end of the elementary school period. It is customary for the sewing and textile work to be introduced first, foods and cooking seldom appearing as a subject in the program before the fifth or more usually the sixth year. In planning such courses the usual

method of procedure is to base the course on the fundamental stitches in sewing and the various classes of foods in cooking. But it cannot be too strongly urged that all work, however organized, should be the outgrowth of some definite need felt by the children or as the execution of some project or solution of some problem of value in the lives of the children and of interest to them. Sewing processes should be applied to the making of real garments, whether these be costumes for plays or for historical appreciation, garments for the day nursery or Belgian or French orphans, or articles for the children's own use. It should be borne in mind also that the smaller and younger the children the larger should be the muscular co-ordination required, and work requiring fine stitches and close application should not be introduced until the seventh or eighth grade is reached.

In the foods work the processes of preparation and the classes of foods may as well be taught through the preparation of dishes for a class party, an anniversary occasion or a meal to be served to teachers or other guests as through the formal presentation of a series of lessons on the cookery of starch, protein, or fat.

To show the possibilities of this problem method of organization for the lower grades, the following tentative course of study from the Long Beach, California, schools is quoted:

*6th Grade* — 1 hour minimum (1½ hours max.) per week.
Subject — Home Problems.
5B. What can I do to help Mother?
1. Making simple apron to wear in kitchen.
2. Washing and ironing apron and towel.
3. Morning work at home.
4. Simple cooking processes.
5. Serving — setting table — family service.
6. Cleaning.
7. Bed-making — with doll and doll-bed.

5A. Week's work in the home (brief series in each of following lessons).
Monday. Wash day.
Tuesday. Ironing day.
Wednesday. Sewing and mending.
Thursday. Family recreations — wise expenditure, development of family spirit.
Friday. House cleaning.
Saturday. Baking.

*6th Grade* — 1½ hours per week.

6B. School lunch.

1. Study of lunch — manner of packing, what is good, possible cost, food value.
2. Lunch menus and preparations.
   Sandwiches — various uses of breads, fillings.
   Uses of fruit,
   Stewed fruit, jelly, uses of canned and fresh fruit.
   Cookies.
   Uses of nuts.
   Uses of eggs.
   Custard, hard-cooked, sandwiches, deviled.
   Use of milk and cocoa.

6A. Study of girls' undergarments.
   Use of machine.
   Problem — 1. Bloomers or drawers.
   2. Princess slip.
   3. Study of materials and trimmings.

It should also be kept in mind that the execution of a project is but one phase of the home economics work, and that the understanding of the materials used, their suitability for the particular project under consideration, their quality and how to judge it, the processes of manufacture, the conditions of labor under which the materials are produced — the human cost of production — are of even greater importance in the lives of the children than is the proper construction of a garment or the faultless cooking of a dish. The periods devoted to Home Economics may well be divided among discussion, experimentation, and technical processes, and should not be devoted exclusively to practical work in which the time-consuming processes crowd out all possibility of adequate understanding of the subjects suggested above.

*Summary.* — Whatever the scheme chosen for the organization of the work of the first six grades, where work introductory to Home Economics is given in those grades, the children should come to the end of the period with a certain definite appreciation of the activities, a certain fund of subject matter, and a degree of skill in the technical processes commensurate with the ability of pupils of that age.

In textiles they should know the distinguishing characteristics of the various fibers, something of the manufacturing processes in-

volved in the transformation of the raw materials into fabrics, simple methods of testing fibers and fabrics and something of the human relationships concerned in the production of fabrics and garments, — child labor, sweat-shop labor, etc. They should be able to perform the simple hand processes in sewing sufficiently well to produce an acceptable and usable article or garment of simple construction. They should also have acquired, if the work is properly taught, right habits and attitudes toward the work and appreciations of the lives of workers that will tend to put them in sympathy with the world's producers.

In foods they should have acquired an elementary knowledge of the composition of foods, and uses of the various foodstuffs in the body; something of the combination of foods in meals and simple balance in diet. They should know something of typical food industries and conditions of manufacture and should be able to produce palatable dishes and serve simple meals in a pleasing and attractive manner. In addition they should have learned the simple housekeeping processes involved in the keeping of the kitchen and dining-room in condition, formed habits of cleanliness and order both as to person and equipment, and should have acquired the habits and attitudes in connection with this work which were discussed in connection with the textiles.

This may sound like a too comprehensive program for children of the sixth grade age; but it must be kept in mind that all the information acquired and the skill developed are expected to be of a very simple type. Its function is to open up the field to the children, arouse their interest in it, develop proper attitudes and sympathies toward the work and lay a foundation for the more intensive work of the seventh and eighth grades. On this foundation the work of the upper grades of elementary work may be built, enlarging upon the work already given and giving a broader outlook and vision and a keener appreciation of the home and sympathy for those whose labors go into the production of the goods by which that home is maintained.

**Home Economics in the seventh and eighth grades.** — *The aims.* — The work of the first six grades should present a unit

undifferentiated for boys and girls and adapted to no specific need other than that of furnishing a general appreciation of the world's work and of developing sympathy for the world's workers, which should be the common fund of experience for all. With the advent of the adolescent stage of development, however, comes the demand for courses designed to meet the particular interests and needs of the pupils. The boys are now less interested in the cooking and sewing, and go to the shop for wood work or other subjects adapted to their needs, while the girls enter courses now specifically organized as home economics studies.

In these upper years of elementary school there will be found girls with two distinct goals:

1. Those who will continue their education through the four years of high school.

2. Those who must, because of economic pressure, leave school at the end of the eighth year.

In planning a course in Home Economics it is necessary to provide for both groups. In either case the aim of the home economics studies in the seventh and eighth grades is primarily for general education. The course should give to every girl that knowledge and skill in the processes and activities connected with the home which should be an integral part of the education of every young woman, regardless of her future occupation. Stated specifically, the aims of the home economics studies in the seventh and eighth grades should be:

1. To give the girl an appreciation of and sympathy with the problems involved in the conduct of a normal well-regulated home and a disposition to coöperate in its maintenance.

2. To equip her with a body of working principles in food, clothing, sanitation, and hygiene, and an understanding of economics, elementary science, and social connections that will enable her to take an active share in home and neighborhood activities.

3. To develop definite skill and technique in the handling of materials and obtaining results.

To accomplish these results the course in Home Economics should offer as well-rounded a body of material in relation to foods, cloth-

ing, shelter, and right living as it is wise to present to the girl at this age. Fortunately, the present problems in the girl's life offer a tangible basis for the organization of this material; her present share in the care and responsibilities of her home, and in the social life of school, church, and community present very vital interests upon which the home economics course may be developed.

*The necessity for understanding the needs of the girls.* — While the same type of material is recommended for all seventh and eighth grades, adaptations must be made to suit specific conditions and communities. For instance, while the fundamental laws of hygiene and sanitation should be taught to all children regardless of their home conditions, greater emphasis and more time should be spent upon this part of the course in a section of a large city, where overcrowded conditions and insanitary surroundings prevail, than would be necessary in a district where children come from homes where laws of hygiene and sanitation are appreciated and practiced. The same rule holds with other aspects of the home economics work, — adjustments should be made to suit the local needs and demands.

To the end, then, that the course of study may be thoroughly adapted to the class of children which is to be taught, the teacher should, before beginning to plan her course of study, make as thorough a survey as possible of the conditions — sanitary, economic, social, and spiritual — which prevail in the homes of the pupils. She should also become acquainted with the other work of the grades in order to unify the course of study as closely as possible. Suggestions for this may be found in the chapter on Correlation, Part I.

The following suggestive questions may be found helpful in the making of such a survey: [1]

What is the average income of the families of these girls?
Are their homes fitted with modern plumbing?
What is the water supply for these homes?
Have they any connection with a sewage system? If not, what are the sanitary conditions about the home?
To what extent has the property been kept in repair?

[1] *Teaching Elementary School Subjects.* By L. W. Rapeer.

What is the fuel used?
What is the attitude of the family toward:
(*a*) House furnishings?
(*b*) Attractive meal service?
(*c*) Taste in dress?
(*d*) Fresh air?
(*e*) Flies?
To what extent do the individual families feel a responsibility for the welfare of the neighborhood?
Does the present generation understand and appreciate the work accomplished by parents and grandparents?
In what way are the foods used by this community influenced by nationality and creed?

*The time allowance.* — The time to be devoted to the course in household arts in the seventh and eighth years will vary with the school system. The length of the laboratory period should be 80 to 120 minutes. If the course can be organized in such a way as to include within its scope, either wholly or in part, the work in hygiene, art, and science, which are usually taught in separate periods, the time for this comprehensive course could be increased to cover the combined time of all these subjects when taught separately. If, however, this organization is impossible, at least two double periods (80–120 minutes each) and one or two single discussion periods (40–60 minutes) should be allotted to the work in Home Economics in grades 7 and 8, in order to make the work worthy of a place in the upper elementary school. This places the work on a par with other subjects in the curriculum and gives credit equal to one half unit each year. The best teacher of Home Economics must have sufficient time to teach properly those subjects which relate so closely to the lives of the girls, for the processes themselves are time-consuming; and she must also have sufficiently close contact with the girls to know them and to help in guiding them in the development of their ideals in relation to their individual responsibilities in home and community.

*The scope of the work.* — To make the work most effective in these grades, it is not desirable to limit it to a few of the home activities, such as cooking or sewing, but to include as much subject matter and as many processes as are commensurate with the girl's

ability to appreciate and perform. The work should be so organized as to include:

(*a*) Food in relation to its production, selection, cost, care, preparation, and service. (Special emphasis on conservation under present conditions.)

(*b*) Clothing in relation to its cost and selection from the standpoint of hygiene and personal appearance; its care and repair; garment construction with as much of textile study as the problem in hand warrants.

(*c*) Shelter in relation to its cost, the choice of its furnishings, and care.

(*d*) The family — the relation of its members to each other and to the community; division of income; budgets; care of individual members.

*Bases for organization of courses in Home Economics.* — In a recent endeavor to obtain some courses of study in Home Economics that are actually in use, the response most frequently received was that at present no course of study exists nor is one desired. This absence of prearranged lessons was, for the most part, due to war conditions. In an endeavor to work with the various war boards and further their programs in food and clothing conservation, Red Cross and relief work, the plan of lessons was necessarily flexible, since not even those boards themselves knew from one week to the next what would be the most pressing need. But the response was interesting from another point of view as indicating that many teachers no longer feel the course of study as a sacred body of laws from which there can be no deviation, and do feel the needs of the moment to be of sufficient value to permit entire readjustment of plans to fit them. To be sure, there were still found one class sewing on yellow silk pajamas, regardless of shivering Belgian and French orphans, and another giving no consideration to the pressing needs of war economies because "the children will have enough hard things in their later lives and they should not be burdened with unpleasant realities while in school." It is to be hoped, however, that having once made the break from established custom, teachers will never again return to a slavish following of a hard and fast

course of study mapped out on the various processes in sewing, or the food principles in cooking, and feel that their whole duty is done when they have taught the subject regardless of whether or not it has met any need in the lives of their pupils.

It is well, nevertheless, to have some scheme in mind, and on paper also, as to the general field to be covered within a given period, leaving the individual lessons to be determined as the need arises, lest the whole become so indefinite as not to have arrived at any goal.

Various methods for the organization of work are in use at the present time. Perhaps the one most widely used, as indicated above, is that of planning work around a core of stitches, seams, and garments of increasing difficulty in the textile field, and around the preparation of dishes typical of the food principles, — protein, carbohydrate, and fat, — in food study. It is obvious that in order to make garments or cook meals at home, these phases must at some time be covered, and the quarrel is not with the subjects themselves but in the manner of presenting them. It is not necessary, for instance, to learn to make all the stitches or seams before one can make a garment, nor is it necessary to learn to cook all the typical forms of protein or carbohydrate foods before using them in their natural setting of a meal.

Planning on the basis of a meal or the making of a garment of use to the children has the advantage of placing each lesson in its proper relation to the needs of everyday life as it is met outside of school, and so gives to the work a much greater reality and helps to bridge the gap between the artificial school setting and the home. It has the added advantage of utilizing all the principles at short intervals, providing for their constant review and repetition. Where there is included with this, discussion of costs and considerations of selection, and buying from the standpoint of hygiene as well as of economy, combined with visits to shops and markets, a much more satisfactory scheme of work results.

During the past few years another form of organization has been steadily growing in favor, that of the project and problem. By this is meant the organization of material around some activity to

be accomplished or some definite problem to be solved. Considerable discussion has arisen as to the use of these terms and the distinction between them. The distinction is not a hard and fast one, for it is obvious that in the carrying through of any activity numerous problems will be met which must be solved before the work can be carried to completion, and it is equally evident that the working out of some related activity may help greatly in clarifying ideas and in leading to a better solution of problems. Thus if the project undertaken be the making of a garment, problems such as "What kind of material is best suited to this garment?" "How much shall I need to buy?" "What pattern shall I select for it?" etc., will naturally arise. Likewise if the problem be, "What color shall I select for walls and woodwork in this north room?" the actual trying out on a small scale of various colors may be necessary or advisable.

But as usually employed the term "project" is used to designate motor activity or emotional appreciation, while the term "problem" is applied to that type of activity which is primarily intellectual.

W. W. Charters, Professor of Education, University of Illinois, in his article on "The Project in Home Economics Teaching" [1] thus defines the term and explains his meaning:

> In this paper the project is considered to be an act carried to completion in its natural setting and involving the solution of a relatively complex problem.
>
> Four terms of the definition should receive a few words of explanation.
>
> First, the project is a problem. This differentiates it from reflex and habitual acts such as digestion and respiration, which are normally carried on without the intervention of consciousness, or from knitting or dishwashing when they have become habitual. . . .
>
> Second, the project is a relatively complex problem. Problems have many degrees of complexity. The holding of a paring knife, the placing of a glass on a shelf, or the closing of an oven door, are problems whenever they involve any modicum of thinking. On the other hand, such complicated actions as the preparation of a roast or the canning of fruit are equally problems when they involve any degree of thinking. . . .
>
> Third, the project contemplates the solution of a complex problem as one step toward carrying over of the fruits of the solution into some form of action. For instance, it is possible to introduce the class to the complex

[1] *The Project in Home Economics Teaching.* By W. W. Charters. "Journal of Home Economics" for March, 1918.

problem of fruit-canning, to view it as a complex of subordinate problems rather than an agglomeration of isolated problems, to teach the steps in the process and the reasons for each, and stop at that point without completing the act of canning. This is the theory of canning without the practice. It constitutes the solution of a complex problem, but is not a project because by the definition of the term performance of the act is necessary. . . .

Fourth, in order that the multi-problem which is carried over into action may become a project it is necessary that the action be completed in its natural setting.

It would seem from this article that Professor Charters uses the terms project and problem synonymously.

Dr. Wm. H. Kilpatrick in his article[1] on the project method identifies the project with purpose, — as purposeful activity on the part of the child, — and considers the problem to be one type of project in which the purpose is to untangle an intellectual difficulty. He recognizes four types of projects as follows:

Type 1, where the purpose is to embody some idea or plan in external form, as building a boat, writing a letter, presenting a play; type 2, where the purpose is to enjoy some (esthetic) experience, as listening to a story, hearing a symphony, appreciating a picture; type 3, where the purpose is to straighten out some intellectual difficulty, to solve some problem, as to find out whether or not dew falls, to ascertain how New York outgrew Philadelphia; type 4, where the purpose is to obtain some item or degree of skill or knowledge, as learning to write grade 14 on the Thorndike Scale, learning the irregular verbs in French. It is at once evident that these groupings more or less overlap and that one type may be used as means to another as end. It may be of interest to note that with these definitions the project method logically includes the problem method as a special case.

The question may be raised as to how this method differs from that of the organization discussed above, where the garment is made the center around which the work is organized in the clothing work, and the meal in the food study, and the answer is that there is no difference provided the garment and the meal come within the child's purposes and those projects are seen as the controlling factors throughout. The difficulty is that too often the work is the teacher's choice and the material as presented from day to day shows

[1] *The Project Method.* By Wm. H. Kilpatrick. "Teachers College Record," September, 1918.

no purpose beyond the immediate lesson, and it is only after a series of lessons of greater or shorter length that their relation to the making of a garment or to the serving of a meal becomes evident.

The method does not even preclude the planning of work on the basis of stitches and seams, or on the food principles as discussed previously, except that such organization is not likely to come within purposes that children or even high school girls are capable of cherishing. College women engaged in scientific investigation might conceivably undertake the study of starch or protein in food as an end in itself, or the practice of basting, running, and hemming stitches for improvement in technique, but such projects would not appeal to elementary or high school pupils as worth while nor be chosen by them if they were free to make choices for themselves.

This method of planning has both its advantages and its limitations. Among the advantages may be cited: First, that it gives a definite goal to be reached, in the light of which activities undertaken or solutions offered may be examined and evaluated. Second, it presents the subject as a whole at the beginning and so gives a reason for the various lessons or steps.

Thus, if the making of a garment is the goal it may be accomplished in one of two ways: first, as a series of isolated lessons in which the characteristics of fabrics are discussed apart from their use in connection with any one garment, stitches and seams practiced, and finally a garment decided upon in the making of which these various phases will be applied; or, second, the garment may be decided upon as the project to be undertaken, — the study of fabrics best suited to the garment in hand then becomes a necessity, and the stitches and seams are learned by their direct application, or at least a motive for their practice is secured. All phases are thus seen in their proper relationships.

A third advantage of the project method is that it makes a much stronger appeal to the interest of the pupils to see the project as a whole and to have a part in deciding upon it and upon the phases that need special study, investigation, and practice.

There are certain limitations to this method, however. It is evident that only such material as is needed for the carrying

through of the particular activity or the solution of the specific problem is used and care must be taken to see that proper organization and systematizing of a subject are being secured and that the relationships of the various parts of a study to one another are being grasped. Organization on the part of the pupils is most important if the material is finally to be in usable form as a guide in future situations, and the teacher must provide opportunities for securing and testing it.

Another limitation of this method is the difficulty of securing problems and projects that are vital to the pupils. These should be those of the children's own choosing as far as possible, because of the whole-hearted effort that goes into any undertaking that is peculiarly their own. But where they are unable to decide upon a project for themselves or where an important phase of the subject is being overlooked, it becomes necessary for the teacher to step in, and a high degree of skill is necessary so to present problems or suggest activities that they will appeal to children as worth while and will be taken over by them whole-heartedly as their own.

*Home economics studies for the seventh grade.* — It has been suggested above that the work of the seventh and eighth years should not be confined merely to the subjects of cooking and sewing but should include all the phases of household activities which pupils of that age are able to appreciate and perform.

To give assistance in organizing the work for these two grades it might be well to indicate the center of interest in each, around which the activities may revolve. The girl and her home cannot easily be separated, but during the seventh grade the *girl* may be the center of thought and *her part* in the solution of problems concerning food, clothing, shelter, and the family may be emphasized. Her problem may be to determine what she should know and do about food, clothing, and shelter in order to do her part as member of her family and of society. Her solutions will be found in increasing her knowledge and in developing her ability to do along the various lines of household activity in connection with the following:

(*a*) *Food.* — Given definite situations to meet, such as income, health, and conservation requirements, market conditions, etc.,

what food shall the girl be able to select, prepare, and serve so that she may be of help in doing the same with intelligence in her own home? This question must be answered in terms corresponding to the question, and will of necessity be worked out differently in different localities.

The various processes of cooking when applied to simple food combinations can easily be accomplished by the girl, and an able teacher will plan to make use of all of them during the year.

Various types of food material representing the several food principles should be utilized, and the effects of dry and moist heat, salt, acids, etc., upon them should be taught as opportunity arises other than through the method of adhering to a stereotyped logical course of study based upon the accumulated knowledge of the scientist. The serving of food in a manner that may be utilized in the home, the care of foods, both before and after cooking, the choice of foods for various occasions should all receive the consideration the topics merit and there should be conscious effort on the part of the teacher to include them.

(*b*) *Clothing.* — The questions of economy, conservation, hygiene, and art enter into the solution of clothing problems; and again the varying conditions of different situations must determine their solutions. The subject matter will revolve around the practical work of the sewing room. The construction of a garment of interest to the girl, such as an attractive apron, a pair of bloomers, a middy blouse, or a Red Cross garment, gives opportunity for textile study in the choice of material, the study of patterns and their economical placing, the study of many sewing processes to be accomplished by hand and by machine, the hygiene of clothing, including the laundering of simple articles, the comparative cost of home-made and ready-made garments, and any other topics of vital interest.

The question of economy and conservation makes the care, repair, and remodeling of garments, and the removal of spots and stains, a necessary consideration. The question of the choice of becoming line and color at once becomes a feature of interest and time should be taken to develop this phase.

(*c*) *Shelter.* — In connection with shelter the girl shares an interest. There are many home activities with which seventh grade girls should be acquainted and which should be utilized as a basis for instruction in school. The care of the girl's own bedroom, the help she can give in the care of other rooms in the home, problems of cleaning in connection with the work in the kitchen, and the preparation of food, are all topics that should be provided for in any course of study and when properly motivated meet with the enthusiastic response typical of the girl at this age.

The following scheme is presented by way of suggestion for the adaptation of the above material based on the problem method. In planning the course the children should coöperate to the fullest extent in deciding on the work of the year and should feel the problems as really theirs.

## Suggestions for Lessons in Grade 7

### *Problems for the Year*

Food and clothing are prepared in our homes. What can we learn at school that will make us helpful to our parents at home?

I. Since I wear washable clothing at school, it takes a great many garments. What garments that I need can I learn to make at school?

(*a*) What garments would it be possible for me to make?

(*b*) Why are cotton garments considered best for school wear?

(*c*) How can I trim them so that they will be dainty and yet simple?

A. Series of lessons on making of garments of interest to children, outside garments if possible.

Learning simple embroidery stitches or crocheting lace for trimming. This problem may be begun

I. Why does mother take so much care in planning the meals?

(*a*) Why do I need food?

(*b*) What foods will give me the things I need?

(Simple classification of food.)

(*c*) How must I cook them in order to make them most useful to my body?

A. A series of lessons on the preparation of dishes suitable for luncheon, with special emphasis on carbohydrate foods. The last lessons of the series are devoted to the planning and serving of a luncheon

in class till stitches are learned, then can be finished at home.

Making of garments for Belgian or French orphans, or for the poor family adopted by the class, should be substituted here instead of personal work as long as the need lasts.

Stitches and seams will be taught as the need arises. Machine work will be introduced if not already taught.

1. *Suggested Series. Problem.* Why are my school clothes made from cotton materials?

*Lesson 1.* Selection of fabrics.

*Lesson 2.* Choice of design.

*Lesson 3.* Interpretation of pattern and cutting garments.

*Lesson 4.* to . . . Construction of garment.

at a certain cost, the class making market list and doing marketing.

*Suggested Series*

1. What shall I bring in my lunch box?

*Lesson 1.* Prepare sandwiches; serve with milk.

*Lesson 2.* Stuffed eggs; served with bread and butter and fruit.

NOTE. — These two lessons give opportunity for food classification and for introduction of needs of body. If they can be arranged so as to come at the luncheon hour it would be better than having the meals served in the middle of the morning or afternoon.

2. If I go home for luncheon what foods should I eat?

*Lesson 3.* Cookery of vegetables.

*Lesson 4.* Cream soups.

*Lesson 5.* Cornstarch pudding.

*Lesson 6.* Plan luncheon; make market list; practice simple home service.

*Lesson 7.* Serve luncheon to members of class.

B. Breakfast series, emphasis still on carbohydrate cookery.

1. What kind of breakfast do I need before starting to school in the morning?

*Lesson 1.* Cook cereal.

*Lesson 2.* Stewed dried fruit.

*Lesson 3.* Make cocoa.

*Lesson 4.* Sautéd cereal, or French toast.

*Lesson 5.* Planning breakfast.

*Lesson 6.* Serving breakfast.

*Seasonal Problems*

*Thanksgiving Lesson*

Prepare something for hospital or poor family in neighborhood.

*Christmas Problems*

What can we do to make Christmas happy for the family our class has adopted as well as for our own family and friends?

1. Articles of used clothing or toys may be collected by the children and mended and cleansed for gifts to the less fortunate neighborhood.

In one school, boys in the manual training classes repaired toys needing nailing, gluing, painting, etc., while the girls made new clothes for the dolls or laundered and repaired the old ones.

In another school, the name and number of members of a family in destitute circumstances was obtained from the Charity Organization Society and all the classes in clothing and in foods combined to prepare a Christmas box. Clothes were made for the children, money was collected for the mother to buy something for herself, and foods and candies were prepared for the Christmas dinner.

2. Making some simple Christmas gift for member of family or friend. Linen material to be used if possible, giving opportunity for study of flax and linen.

II. What can we do to make our sewing-room more attractive?

Series of lessons on making home

*Lesson 1.* Prepare some holiday dish that may be sent to family.

*Lesson 2.* Make candy. Send some to family, take some home.

2. We like hot breads for breakfast on cold winter mornings. What kinds can I learn to make at school?

(Series of lessons on flour mixtures may follow.)

II. What can I learn about the care of my room that will make me better able to help at home?

attractive. Redecorating or freshening some room in the school, — sewing-room, principal's office or teacher's room may be used as the concrete problem.

If there is an art department in the school this problem may be carried out in coöperation with it.

III. We must take greater care of our clothing, now that so many little boys and girls have not enough to keep them warm.

(*a*) How shall we determine whether or not our garments are worth mending?

(*b*) What different things may be done to clothing to make it last longer?

Series of lessons on care and repair of garments, — removing spots, laundering, patching and mending, etc. A study of wool and woolen fabrics should be included here.

IV. Does clothing have anything to do with keeping us well?

*Hygiene of Clothing*

These lessons should be devoted to a critical study of underwear, shoes, dresses, and outside clothing and should be abundantly illustrated with actual garments illustrating the various points.

Clean principal's office or teacher's room.

NOTE. — This problem may be planned in coöperation with the clothing and textile work and be combined with it.

III. Why is it that nearly all meals have meat for the main dish?

(*a*) What does meat do for the body?

(*b*) Are there any other foods that do the same thing as meat?

(*c*) How should meat and similar foods be cooked in order to be of most use?

Series of lessons on meat and egg dishes, alone and in combination, emphasizing rules for protein cookery.

Lessons on meat substitutes and meat extenders, with study of relative costs.

This series should end in the planning and serving of a more elaborate luncheon to three or four guests.

IV. Our table runners and doilies are soiled from our luncheon. How may we freshen them for the next meal we serve?

Lesson on washing and ironing of table runners and doilies.

V. What kind of clothing does the baby need? Can I make a garment for the day nursery?

V. What can I do for the baby that will help mother?

Lesson on bathing the baby, followed if possible by a visit to a day nursery.

Lesson on preparation of children's food.

NOTE. — The bathing lesson may be given as a demonstration or a large washable doll may be used on which the children may practice; or the two methods may be combined.

By the end of this year pupils should have acquired considerable familiarity with tools and utensils and freedom in their use. They should have gained a working knowledge of basic principles both in the making of simple garments and in the preparation of typical foods.

They should have learned the characteristics of the fabrics with which they are working in the clothing classes, and in food study should have learned to select foods with reference to the needs of the body and their combination in a meal. In addition they should have gained an introductory knowledge of phases of the subjects closely allied to the textile and food fields, such as clothing conservation and hygiene; meal planning, preparation, and service. In addition to this they will have had some experience in caring for the baby, in laundering, and in the care of a home.

In this method of planning no provision is made for learning stitches or seams aside from their application to a garment, though by the end of this year it is probable that most of the common principles will have been taught through the various garments made. Likewise in the food study, matters of routine such as dish-washing and measuring will be taught in connection with their immediate need in a lesson and will be the better learned because the pupils see the use for them.

*Home economics studies for the eighth grade.* — It is advisable that the home economics studies for the eighth grade be planned in

such a way that the girl will have, during the last year of the elementary school, when she is perhaps best prepared to receive it, an introduction to those studies which will give her an appreciation of the significance of a normal, well-regulated home and the benefits it bestows, as well as the possible relationship of this home to the community of homes. This is important, whether the girl continues her education through the four years of the high school or leaves to go to work, or to remain at home at the end of this period.

The problems to be solved by the girls are all very vital and are those which they hear discussed daily in their homes, but the teacher of Home Economics is to help shed new light on methods and ways of solving these home problems which will help the girl to lead a more helpful and healthful life in her family and community.

In order to give the girl an appreciation for normal home life the following topics should be considered and may be stated problematically to the girl in introducing her to them. They may be solved in the classroom laboratory or the supplementary school apartment or practice house, or some phases of work planned for each:

| | |
|---|---|
| 1. The selection of the home: Based on the division of income, sanitation; location in relation to work, school, etc. | Where shall we live? |
| 2. Decorating the house and furnishing it for a certain amount. | How shall we decorate and furnish the house in the most tasteful way, considering expense? |
| 3. The division of the family income: | How shall the family income be divided so as to give the greatest amount of satisfaction? |
| (*a*) For food. | How much shall we spend for food? |
| (*b*) For clothing. | How much shall we spend for clothing? |
| (*c*) For rent. | How much shall we pay for rent? |
| (*d*) For operating expenses. | How much shall we spend for lighting, heating, and other running expenses? |
| (*e*) For savings. | How much should my family aim to save each year? |

(*f*) For recreation, etc.

What kind of recreation shall we have; where shall we get it?

4. Care of the house:

(*a*) Cleanliness.
Housewifery methods.

What should we know in order to keep the house clean and to manage it well?

(*b*) Repairs, refurnishing.

When shall the house furnishings be replenished?

5. The relation of economy to efficiency in the family life:

How can we spend or save so as to make all the members of the family most efficient?

(*a*) Saving and spending.

Of the time saved, how can it be used to best advantage?

(*b*) Necessary foods.
Values.
Combinations.
Serving of.

What kind of foods do the various members of the family need?

What combinations are pleasing in meals?

How can the meals be prepared so as to have all ready at the same time?

How shall the dinner be served?

(*c*) Home-made *vs.* ready-made clothing.
Kinds of clothing.

What kind of clothing will the various members of the family need? Shall it be bought ready-made or be made at home?

(*d*) Recreation.
Summer vacation.
Amusement and use of leisure time.

What other factors will help to maintain health?

6. Responsibilities of the members of the family outside the home:

How can I prepare myself to be a helpful factor in the community?

(*a*) Church associations.

What are my responsibilities?

(*b*) Neighborhood ethics.

(*c*) Municipal housekeeping.
Pure food.
Markets, weights and measures.
Laundry and bakery conditions, etc.

(*d*) Consumers' League.

(*e*) Child labor, etc.

The solving of these problems of the home centers about its activities — the planning of the family income so as to buy a living place of the best possible kind, the best and most nutritious food for the money available, the most suitable forms of recreation for the group, the most advantageous methods of saving, the most satisfactory methods of caring for the home and its individual members.

In choosing the studies and planning the course of daily lessons with its problems, the activities will be emphasized upon certain days, while other periods will be devoted to discussion of problems. For example: The activities may emphasize the cooking of a well-balanced meal for a family of six at a cost of fifteen cents per capita; the baking of bread and comparison with the cost of baker's bread; or again the cleaning of the dining-room and the bathroom, with their related problems of science. It may be the cutting out of a middy blouse to be made at school with the related problems of ready-made and home-made values, or the designing of a suitable school coat or dress. At other times when discussion is in order, the problem may be the division of the family income; suitable recreation for the family; ways of saving; standards for healthful, sane living; selection of suitable textiles for furnishing the bedroom or living-room; suitable types of furniture to be used; or actual excursions may be taken as the method of conducting some lessons in order to see and buy the furnishings, if an apartment or house is to be equipped.

All these problems or topics should be so arranged in the daily course of study as to offer continuity of thought. There may be a controlling problem for the year stated, as for example: "What are the daily problems of my family — mother, father, three children, and grandfather? The family lives in Cleveland, Ohio, and has an income of $1500."

This big problem will naturally subdivide itself into the smaller problems which will contribute to the solving of this big controlling idea for the year. The sub-problems may be such as described in the above paragraph — and each of these may often be solved through the execution of a certain project.

## SUGGESTIONS FOR STUDY AND REVIEW

1. What arguments would you use with your school superintendent to persuade him to introduce industrial arts into the first six grades?

2. How would you go about planning a course in industrial arts for your school if you were asked to assist in this work?

3. Why is the term industrial arts applied to the work of the first six grades and Home Economics to that of the seventh and eighth grades?

4. In what ways may home economics studies contribute to the aims of elementary education as a whole?

5. Outline a unit of work for a group of seventh grade girls attending an exclusive private school. For a group of Italian children in the foreign section of a large city. For a group of country children.

6. Will you require all of the pupils in a grade to work on the same type of garment or prepare the same dish? If so, how much freedom of choice will you allow?

7. Talk over with your eighth grade pupils the field of Home Economics and get their ideas as to what girls of their ages should know about the subject. Let them help plan the work for the year.

8. If you have two eighth grade classes, allow one class to plan its own work and in the other require work of your choosing. Is there any difference in attitude toward the work? In results obtained?

## REFERENCES FOR COLLATERAL READING

The School and Industrial Life. Russell and Bonser.

School and Society. Dewey.

Schools of To-morrow. Dewey.

Place of the Industries in Elementary Education. Dopp.

Speyer School Curriculum. (For outline of Industrial Arts Course.)

Teaching the Elementary School Subjects. Rapeer.

Home Economics Studies in Grades Seven to Twelve. Teachers College Record, March to September, 1918.

Teaching by Projects. General Science Quarterly, Vol. 1.

The Amy Schussler Apartment. Teachers College Record, January and March, 1915.

The Project Method. Kilpatrick. Teachers College Record, September, 1918.

The Project Method in Home Economics Teaching. Charters, Home Economics Journal, March, 1915.

# CHAPTER VII

# HOME ECONOMICS STUDIES IN THE HIGH SCHOOL

## Section I

I. Introduction.
   A. Value of a secondary school education.
   B. The high school of the future.
II. Home economics studies in the four-year high school.
   A. General classification of courses.
   B. The home economics studies should have a place in every high school course for girls.

## Section II

I. Home economics studies in the junior high school.
   A. Organization of junior high school.
   B. The aim of the home economics studies in the junior high school.
   C. Home economics studies for seventh, eighth, and ninth years for girls who will proceed to senior high school.
   D. Home economics studies for the girl who must leave school to go to work.
II. Home economics studies in the senior high school.
   A. Home economics studies for liberal education.
   B. Home economics studies for vocational training.
III. Home economics studies in the small high school.

## Section III

I. Home economics studies in evening classes and continuation courses.
   A. In evening classes.
   B. Continuation classes.
   C. All-day vocational schools.

## Section I

**Introduction.** — *The value of a secondary school education cannot be estimated.* — It has been said that the university trains the leaders of leaders, but the high school trains the leaders of the people. Comparatively few girls and women can have the advantage of the longer period of education. Those who can afford to continue after completing the elementary school course of eight years have often dropped out in a year or two because of lack of interest in the studies which failed to meet their needs. It is unnecessary to argue for the continuance of education through high school but to suggest that the high school of to-day and of to-morrow should meet the needs of the girl — her capacities and interests as well as the needs and requirements of social life as it exists. The courses must be planned in such a way as to meet more fully the physical, social, vocational, and spiritual needs of the pupils. So often in the past the high school course has prepared for college entrance only, rather than for these various needs of the girl, or sometimes it has aimed for the completion of a particular course in high school without reference to the girl's capacities or interests.

*The high school of the future will extend its influence.* — It will cater to many more groups of people through day and evening courses in short units or series of lessons or in more prolonged courses. The high school of any locality should be the people's university, where each should find something in the secondary field of study which will be of value and help. Such courses may be stepping-stones to greater economic success or prove of inspiration according to the needs of the individual. To illustrate: a girl engaged in a business office as stenographer may feel her limitations in English. It should be possible for her to go to high school and get, within a relatively short period of time, a course which will assist her to advance in her line of work. Or a dressmaker or girl engaged at machine operating in a factory may wish to return for a short series of lessons in draping of materials or instruction on a new type of power machine or for a course in

personal hygiene, in food preparation and food values, or some other home-making course. Schools of the future will afford this opportunity. These may not be the needs of another group; rather it may feel the necessity for instruction along the lines of history, science, and literature, because of the different aims of this group. It is undoubtedly to be expected that the progressive high school of to-day and to-morrow will be marked by greater flexibility in its organization. It will offer more definite objectives or goals in courses for those wishing to prepare for them, but will not lose sight of the fact that in a democratic scheme of organization studies must be so arranged and coördinated that interchange of courses is possible as the interests, aims, and needs of the pupils emerge.

This chapter will offer some suggestions for the introduction of the home economics studies into the courses of the progressive high school, which is flexible in its schemes of organization and adaptable in its methods of teaching.

**Home economics studies in the four-year high school.** — *General classification of courses.* — The courses offered in the high school of to-day may be classified in a rather general way. (1) There are those which may be said to be academic in nature. They prepare as a rule for entrance to college or for normal school or in some cases for higher technical institutions. These courses are often designated in the high school catalogues as the classical course, the academic, the Latin scientific, the scientific, the general classical, the general preparatory, the modern English course, according to the requirements of the higher institutions. They aim to prepare the young people for a particular field of interest as they decide to meet the requirements of a chosen college or higher institution. (2) The normal training course in high school may be said to fall in a group by itself. It exists in high schools to-day in many parts of the United States and aims to prepare its graduates to become teachers of all studies in the elementary schools. As a rule these graduates become teachers in the rural schools and often go later to normal schools for more training, after a few years of experience in teaching. (3) There is found offered also in high schools a group of courses which may be said to

be rather general in their make-up; that is, in the list of courses prescribed. They are often called the general high school course, the general preparatory course, the home economics course, the household arts course, the homecraft course, or manual arts course. (4) There are those courses which are said to be technical or vocational in nature, as for example, the so-called commercial course, the agricultural course, the industrial course, the art course, the practical arts course, the home-making course, the manual arts course, etc. It may be said that the aim of these courses as offered in high school is as a rule to prepare for industry, agriculture, commerce, and the home as soon as the high school course is completed; although by certain adjustments in due season it should be possible for the student to change her course and prepare for entrance to higher technical institutions or other schools for special training.

*The place of home economics studies.* — The home economics studies should have a place in varying degree, in choice of studies and in differentiation of method, in every course taken by girls in high school. It is the purpose of this section of the book to discuss how the home economics studies may be introduced to meet the needs of the girl who chooses a course in any one of these large general groups as outlined above.

1. Home economics studies for the girl in the four-year high school preparing for college. — The number of girls preparing for college has increased decidedly from year to year for the past ten years. As a rule these girls have had little opportunity to elect any home economics studies, and in but few high school courses are such studies prescribed for the girl preparing for college entrance in the college preparatory course, the Latin scientific, or other course in this group chosen to meet her special college entrance requirements. The colleges are becoming more liberal about accepting units of home economics studies for entrance. About 50 per cent of all colleges recognize Home Economics for admission. In the report by C. D. Kingsley [1] of the 79 A.B. colleges accept-

[1] *College Entrance Requirements.* U. S. Bureau of Education, Bulletin No. 7, 1913.

ing Home Economics for admission, 31 recognize not more than 1 unit of the 15 units for entrance, 18 accept 1½ or 2 units for entrance, 9 accept 3, and 21 accept 3½, 4, or more units. Only 65 of the 203 A.B. colleges do not recognize some one or more specified vocational subjects for entrance, and certain of these 65 colleges will consider such subjects. The lack of recognition of these studies has been due very often to the fact that high school teachers in this field have failed to make the content of the studies measure up to standards which are in a degree comparable to those in other fields of study. On the other hand, teachers of Home Economics must be on their guard, in outlining courses to be offered for college entrance units of credit, that they think not only of the standards but of the needs of the girl to know those things which will enable her to live more healthfully, economically, and wisely while she is pursuing her college course. This has been called the "maldevelopment" of work in home-making or home economics studies "into academic pseudo-scientific instruction in order to curry favor for college entrance recognition."

What should be the aim then in organizing the home economics studies for girls choosing courses in this first large group, which have usually, as their ultimate goal, entrance to higher institutions? They should offer primarily to this girl the subject matter which will help her in her daily home living both during the high school course and while she is a student at college. This help should be given along the line of her needs in the study of healthful food, clothing, living conditions, and the sciences and arts related to these studies.

How much time should be given to these studies? As a rule they have been elective, but occasionally in some high schools one finds a limited amount of time required. Even though elective, the girl preparing for college entrance under present conditions can devote but a small part of her time to work in this field. The choice of studies, their arrangement and content, must therefore vary from those offered to girls who can take some home economics studies in each of the four years. The following quotation and definition of a unit of work for college entrance from the above re-

port shows that two hours of home economics studies in laboratory are counted equal to one of studies in classroom. Some phases, however, of the home economics studies may be called classroom studies.

### Amount of Work Required for College Admission

#### *Definition of the Unit*

The discussion of the amount of work required for admission to college is greatly simplified by the adoption of a "unit" in terms of which all high school work may be measured. Within the last few years nearly all colleges have come to express their requirements in units. There still remains some variation in definitions of the unit, but the following definition is given in the fourth annual report of the Carnegie Foundation as the result of a conference between the officers of the Foundation and representatives of the National Conference Committee on Standards of Colleges and Secondary Schools:

"A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work."

This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high school course as a basis and assumes that the length of the school year is from 36 to 40 weeks, that a period is from 40 to 60 minutes in length, and that the study is pursued for four or five periods a week; but, under ordinary circumstances, a satisfactory year's work in any subject cannot be accomplished in less than one hundred and twenty 60-minute hours or their equivalent. Schools organized on a different basis can nevertheless estimate their work in terms of this unit.

Two hours of manual training or laboratory work are generally assumed to be equivalent to one hour of classroom work.

The following suggestions are offered for a course which must be offered in two half units. These courses may be taken in alternate years, but it is perhaps advisable to offer them in the first and second years on account of the pressure of work during the later years due to college examinations, and because, too, it often happens that girls leave high school at the end of the first or second year, and all girls need these studies. The essential aim is that the girl going to college should understand how to live healthfully, and should have instruction along all of these lines contributing to better living. For convenience the course is outlined in four parts, one part for each half year of the two years of work.

*Home Economics I.* (A year's course, 4 hours per week, ½ unit), 1 hour discussion, 2 laboratory periods of 1½ hours each.

First half year. 20 weeks. 4 hours per week.

*General Topic.* Clothing studies in relation to healthful and economic living.

Second half year. 20 weeks. 4 hours per week.

*General Topic.* Food studies in relation to healthful and economic living.

*Home Economics II.* (A year's course, 4 hours per week, ½ unit), 1 hour discussion, 2 laboratory periods of 1½ hours each.

First half year. 20 weeks. 4 hours per week.

*General Topic.* "Applied economics studies," earning, spending, and saving, or earning and spending wisely.

Second half year. 20 weeks. 4 hours per week.

*General Topic.* "Learning to live," or "The home and its care." Studies dealing with making the living place a healthful, attractive home wherever it may be.

These two years or one unit of work might be abbreviated and offered in one year as a general survey course. The home economics studies, when offered so as to give the girls a sense of the scope of this field of work, often lead to interest in specialized and advanced work along one or all of these home economics lines of study. It is important that girls going to college should have a knowledge of all the fundamental subjects as suggested in the above four half years of work. The high schools of the past have more often offered the girls going to college a year of cooking or a year of sewing, omitting the vital instruction concerning the selection of clothing and the selection of food and the important problems of sanitation, the budget, the wise spending of money and other topics of great value to the girl in her high school and college living.

The following paragraphs discuss more fully each of the four half years of home economics studies as outlined briefly above, and may be suggestive to those planning combinations of studies for girls, in preparation for more healthful living.

## Home Economics I. (First Year)

### *First Half Year. Selection of Clothing*

The emphasis should be placed during this half year on the wise choice of materials and clothing, whether home-made or ready-made. This should include a study of textiles, their prices, kinds and adaptation to use, also inexpensive substitutes, adulteration of materials and information in relation to conservation and care of materials in the home and laundering of textiles. Darning, patching, and care of dress accessories are very important. Some lessons should be devoted to the study of the hygiene of clothing; its daily use, care, and storage, as a phase of conservation of health and materials. A study of materials, color, line, style in costume as illustrative of a high school or college girl's clothing, in adaptation to her uses. Placing the emphasis on the selection of clothing as indicated above does not mean the omission of the making of garments. Some construction of clothing should be offered, based on the previous training of the girl. It is not to be expected that she will become very expert in the making of garments, but that the preparation of even a single garment will give her some knowledge of the use of patterns, the sewing machine and the fundamental principles in the making of garments. All of this will form a basis for judgment in the selection of garments, and this construction of clothing should be taught with this thought in mind.

This series of lessons of eighty hours or twenty weeks of four hours per week might be arranged in four groups or units within the series, of twenty hours of instruction in each. Units I and II in this series might be devoted to the making of a simple shirt-waist dress, by machine, with the topics outlined in the above paragraph controlling the construction. Unit III might treat of costume design and textiles as suggested more fully above; Unit IV, of the care of clothing, also hygiene and conservation suggestions with laundering of textiles and simple renovation of clothing.

Such a series for twenty weeks would be of more value to a

girl proceeding to college, or even to one who left school at the end of these twenty weeks, than the often customary half year or full year devoted to construction of undergarments, fine lingerie, and embroidery.

### Home Economics I. (First Year)

*Second Half Year. Selection of Food*

The emphasis should be placed during this half year on the wise choice of food and instruction in food values, through the preparation of meals. The high school and college girl must often take some of her meals, at least, away from home and she should learn how to select wisely, within her means, that food which will furnish the nutritive values for healthful daily living. A course of lessons outlined so as to treat of the preparation of foods in the order of building a fire, washing dishes, cooking meat, fish, making batters, doughs, salads, desserts, will never accomplish this kind of instruction. This type of course is fast disappearing, but still remains in the less progressive schools which are not keeping in touch with modern educational theory and its adaptation to the field of home economics studies.

The studies during this half year should be so arranged that the girl will be given a knowledge of food values in relation to health. She should understand what quantity and kind of foods are necessary for a growing girl and should be taught how to select a balanced ration for a certain period of time. The care of foods in relation to health, the ice-box and its care, the proper handling of foods at home and in the market are important in their bearing on the large topic of selection of food. This does not mean that lessons in food preparation are to be omitted. Preparation of foods in relation to the meal as a whole should be offered, because it will give the girl a fuller appreciation of how to select and combine her foods. If she has made white sauce and realizes how essential it is that the starch should be cooked, she will be a better judge of such foods as she selects and will discover perhaps the taste of the starch in the foods chosen. She will be able to judge be-

tween foods poorly prepared and those which are suitable to eat, and will avoid the places where the preparation of foods is not conducive to health. This half year of study should emphasize also the conservation of food supplies and the wise use of substitutes in relation to the health of all members of the family. Simple dietetics should be studied in relation to selection.

This series of lessons of eighty hours or twenty weeks of four hours per week might be arranged in four groups or units within the series, with twenty hours of instruction in each. Units I and II in this series might be devoted to the preparation and serving of simple dishes for luncheons, breakfasts, and dinners with the emphasis as suggested above. Unit III might treat of conservation and the use of food substitutes through their preparation in addition to such subject matter as presented in Units I and II, with emphasis on the purchasing of food materials and the study of food industries. Unit IV might treat of the preparation of foods in relation to their care in the home, suggestions for prevention of waste and additional consideration of food values.

### Home Economics II. (Second Year)

*First Half Year. "Applied Economics Studies"*

Earning money, spending it wisely, and learning to save are topics in which all high school and college girls should be interested. Many girls would pilot their ships through different channels if their attention were called to the many lines of opportunity for work and service which are open to girls and women. The high school girl is eager to learn about the necessary qualifications for these various opportunities. She wishes to know about the training for them and where and how to obtain it and the future outlook in the various fields. Somewhere in the high school course, time should be given to just such subject matter because it is so vital to the girl.

She needs also to learn about her own budget. She may or may not have her own allowance, but at least she can estimate how much she is costing her parents for clothing, etc., and the discussion of

the personal budget leads naturally to the discussion of the family income and its division, which is so important. The high school and the college girl need to understand in these days especially the necessity for thrift.

She should also understand the customs, laws, and rules of savings banks and insurance companies, and the opportunities offered for saving. She should know how to keep accounts, and she should understand the use of bank checks and the principles of simple banking.

This instruction may or may not be offered in some other courses or departments of the high school. The essential thing is to see that the high school girl going to college gets this information, and from the point of view, if possible, of the home and its requirements.

This series of lessons of eighty hours might also be arranged in groups or units of four series of twenty hours of instruction in each. Unit I might be devoted to the study of various opportunities for wage-earning open to girls and women. These lessons might be given by the vocational adviser in high school or by the teacher of Home Economics if she will prepare herself. Bulletins and information may be obtained from the Intercollegiate Bureaus of Occupation, from the Federal Vocational Bureaus of the Department of Labor, located in about fifteen cities of the United States, from the Department of Research, Woman's Educational and Industrial Union, Boston. These sources will suggest literature and other places to obtain information. (See also bibliography, this book, page 420.)

The girl in high school wishes information about the following points in relation to each vocation, and the talks might well be organized around these as a basis for discussion. Such talks, followed by conference hours, when the girls may consult the special vocational adviser or the teacher of Home Economics if this task fall to her, will be found of inestimable value to the high school girl seeking light along these lines, and will help her to plan her high school studies in a more intelligent way and tend to keep her in school for a longer period of time.

I. Conditions of Employment.
   1. The occupation and various fields of opportunity connected with it. Define. Its scope.
   2. Wages.
   3. Hours of work.
   4. Vacations.

II. Possible Opportunities in the Vocation.
   1. Opportunities from the standpoint of
      *A.* Numbers.
      *B.* Advancement.
      *C.* Service.
   2. Relation of the particular vocation to related fields, if any.

III. Training for the Occupation.
   1. Where obtainable; conditions; length of training.
   2. Cost.
   3. Previous training; experience if any is needed.

IV. Opportunities for Work in Particular Fields because of After-War Conditions.

V. Bibliography or Literature on the Subject.

The second series or unit of twenty hours might be given to the discussion of the girl's own budget. She may or may not have an allowance. Estimates can be made of the division if she has, or of the cost to her parents for certain items. The budget of an unknown girl with an allowance of $5 or $10 per week might be studied. The division for charity or church, for self, for others, for savings, might form the topics for discussion. This study would include also the clothing budget. It would lead to many interesting discussions of ideals, standards, appropriateness, conservation, healthful living, simple pleasures, and the use of leisure time.

This unit or series would lead up to the next one, Unit III, the family income. A discussion of the allowance for rent, food, clothing, operating expenses, and other expenses will be of value to the girl in enabling her to see her needs in relation to the needs of the family group, and the relative importance of her demands to those of the group. The right division of income makes for happiness of the family group and the wrong division for misery.

Mr. Micawber in *David Copperfield* expresses in a proverbial way the agony of the difference between income and outgo, when the income does not equal the expenditures. Thrift is a necessary lesson to be emphasized, especially during these days of readjustment.

The fourth unit of twenty hours of this series might be devoted to practical banking instruction, drawing checks, balancing checkbook; savings; insurance; simple methods of accounts, etc. Every girl needs this knowledge for use either while away at school or at home.

### Home Economics II. (Second Year)

*Second Half Year. The Home, Its Care and Management*

This group of studies is especially interesting to the high school or college girl. At this period of her life she is interested in her own room and how to make it pretty. This may well be the avenue of approach to any study of home decoration and of furnishing. The care and sanitation of her own room or the home, and problems of personal hygiene, are of great interest at this time. The questions of daily living and personal care are closely akin. Recreation, use of leisure hours, hospitality, and kinds of amusement within and without the home are all vitally important to her, and need to be discussed in order that the girl may plan her days most healthfully.

The studies arranged for this half year may be divided into four groups of twenty hours each. Unit I might be planned so as to take up the principles of house decoration and furnishing, either in relation to the girl's own room at college or at home, or in the discussion of the furnishings of a small house or apartment, where a limited sum is allowed for furnishings. In this connection, if a real house or apartment can be used the work will be much more vital and interesting. If this is not possible, a corner of a large room might be utilized and furnishings borrowed from a local department store. If no other way is possible, scrap-book houses and rooms can be planned for discussion, with clippings from maga-

zines used to illustrate them. Unit II might be devoted to the sanitation problems, cleaning the various rooms, laundering of household furnishings, repairs, cleaning of metals, glass, etc., system of work in the home.

The third unit might well be devoted to discussion of problems of personal hygiene, the care of the feet, body, hair, teeth, nails; proper bathing, proper clothing, proper food, air, and sunshine, proper exercise and water, in relation to daily health. Questions of control, the emotions, anger, fear, hate, jealousy, and their effect on the health of the individual might also be discussed.

The fourth unit might take up for discussion plans for daily healthful living. Recreation, hospitality in the home, entertaining in a simple way, amusements in the home, reading, music, knitting, and sewing should be considered; amusements outside the home, concerts, movies, theaters, pleasures which cost little, simple picnics, river parties, etc., might be discussed with profit. Daily exercise should be suggested, such as tennis, hiking, and other simple pleasures. The relation of the individual to the community, the giving of service, the opportunities in relation to organized societies, groups, churches, settlements, home service work through the Red Cross, should be discussed. There are many opportunities to show the girl her social responsibility outside the home.

2. Home economics studies for the girl in the four-year high school preparing for teaching. — In many states the normal schools are unable to furnish sufficient teachers to meet the demands of the one room rural schools of the state. In Texas, for instance, 6000 teachers are employed in rural districts and in Iowa 12,500 annually. There are about 200 public normal schools in the United States doing teacher-training work, but they are entirely inadequate to the needs. Only seventy-two of these have rural departments. However, 22 states provide for the training of teachers in high school. If the 22,000 graduates of these high schools had had home economics training, their influence would have been valuable in developing home economics in rural schools. The high school graduate either with or without professional instruction often finds her way into the rural school. In the state of Illinois alone 4000

schools are taught by young people who have had no professional training whatever. Two thirds of this group are not even high school graduates. As a rule they must teach all studies, and in some states the present laws require that they must teach some home economics studies, in addition to all of the other studies. The problem then of training this young teacher is a very serious one. The pity is that it is necessary to furnish teachers for our rural schools who have had so little general education. Nevertheless the training in the high school of the rural school-teacher has latent possibilities. In Minnesota to-day 121 high schools are training their seniors or high school graduates for this rural work. As the problem must be met, let us study it in relation to the quantity and kind of home economics studies which should be offered to this high school girl, who will so soon in turn teach them to girls and often to boys in the rural schools.

In the first place, the work should be so planned and arranged during these four years that it is of help to the girl herself; and in the second place, it must be so organized and presented to her in some course or courses that she will get suggestions and help in relation to the type of subject matter to be presented to rural children and certain methods of presenting it.

In view of the fact that many teachers in rural and small town communities enter the teaching field immediately after graduation from high school, and that there is a growing demand for Home Economics as part of the regular grade work, it is necessary to provide for such students a normal training course during the upper years of the high school.

During the first and second years of the high school course, it is possible in many high schools for the girl taking the general course leading to normal training in the third and fourth years to elect, either as work in science or in Home Economics, some of the studies relating to the home. It is often possible for her to elect from two to four units of work along these lines during the first and second years of her course in high school. This work should be so organized as to be of particular interest and value to her in daily living. The subject matter offered during these two years might

be outlined as suggested on page 129 and give her a general survey and a feeling for the significance of these home studies as a whole. This survey course would be equivalent to but one unit of credit, and might be offered in the first year with particular adaptations made for this girl and her problem. Other units of work might follow during the first or second year, as, for example, a more detailed course in food preparation and food values and a more detailed course in clothing and textiles, either as half or full units of credit.

In many high schools where normal training is given, from three to five units are *required* for what is called normal training or pedagogy in addition to other high school studies. This usually includes the following studies, with approximately this division of time.

*Junior or Third Year High School*

| 1st Term | 2d Term |
|---|---|
| Psychology, ½ unit. | Principles of Teaching, ½ unit. |
| Review of Elementary School Studies, ½ unit. | Observation in Model School, ½ unit. |

Total, Junior Year, 2 units of Normal Training.

*Senior or Fourth Year High School*

| 1st Term | 2d Term |
|---|---|
| Psychology and Principles of Teaching, ½ unit. | History of Education and School Management, ½ unit. |
| Practice Teaching, 45 minutes daily, ½ unit. | Practice Teaching for 20–25 weeks with criticism, ½ unit. |

Total, Senior Year, 2 units of Normal Training.

The arrangement of these normal studies varies in different high schools, but this is approximately the amount of time devoted to them where the work is offered during two years (3d and 4th).

The relation of the normal training work in Home Economics to the normal training for teaching the general elementary studies in the rural school must be arranged. The psychology and principles of teaching with observation of teaching in the third year or junior year would lead up to a course in the fourth or senior year

in methods of teaching Home Economics. This must necessarily be brief. It would seem wise to offer this work in methods of teaching Home Economics in relation to a practical course in subject matter in home economics studies in this final or fourth high school year, and to have it accompanied by at least one lesson a week in practice teaching in some of the phases of Home Economics during a full semester, probably the second half year, as a part of the practice teaching work in general elementary studies. One day a week for about twenty weeks with criticism would be very helpful. The practice teaching in this year should have been preceded by observation in the third high school year of lessons in this field of work. A demonstration school and a "teacherage" if available will serve as equipment of inestimable value in this practice teaching, in rural community work in Home Economics. (For suggestions in relation to lesson plans, use of illustrative material, and classroom management, see page 269, Part III.)

This particular combination of subject matter and methods course during the first semester should be planned to give subject matter and methods of teaching each subject along the following lines for sixth, seventh, and eighth grade classes:

1. Food. — The planning and preparing of meals. This should be actual preparation of the school lunch and dishes suitable for other meals, under conditions of limited equipment and cost. Plans for getting supplies and coöperation with the homes should be discussed. Demonstrations of presentation of such lesson by the teacher in charge, with discussion of method, lesson plans, questioning, etc. Use of illustrative materials, plans for getting equipment, its wise use and care should also be discussed.

2. Personal hygiene and appearance, social customs in our homes. — This work might be given in relation to the preparation and serving of the school lunch, table customs in passing food and in table conduct; eating properly, observance of common courtesy customs at table; simple lessons in personal hygiene, as care of teeth, mouth, hair, body, nails; personal appearance, lessons in relation to cleanliness and neatness of clothing, correct carriage, position in walking, breathing properly, etc. Such lessons are often

very much needed by children, and should be given with illustrations and practical demonstrations of the right ways of doing things, followed by practice in actual doing.

A few lessons on the care of the baby and children in the home will prove necessary and helpful.

3. Sanitation of the schoolroom, the school-yard, the various rooms of the home, the outbuildings of the farm. — This series of lessons might start with actual cleaning of the schoolroom, making it attractive with plants and curtains and clean windows and floors. The care of the school-yards and outbuildings and care of the various rooms of the home with credit for home work. This would follow discussions and cleaning of schoolroom. Also sanitation of the farm, location of buildings, care, disposal of waste, care of toilets, cellars, barns. Milk, its care and protection, and labor-saving devices in the farm home.

4. Study of clothing, with emphasis on the care and repair of clothing in addition to the making of simple articles and garments. — Actual articles should be made by the class, adapted to children in rural schools, in grades 6, 7, 8. Simple articles should be made, such as dish-towels, bags, holders, aprons, and simple garments for children, illustrating stitches, principles, and processes in both hand and machine sewing. Lessons in care and repair of clothing are most important, and the utilization of all kinds of scraps both old and new. Discussions should accompany the work which will give these normal students ideas in relation to equipment, how to supply it, and cost. Demonstrations should be given which will show how to present these stitches and processes, the use of illustrative material and discussion of lesson plans.

During the period that garments for refugees are needed in Europe, these may well be substituted for personal garment construction problems. The subject matter in laundering, patching, care, and conservation of clothing materials may well form a part of all such courses of study. It is possible to teach all the necessary stitches, principles, and processes on these as on personal articles; and the children are always intensely interested in this work or in working for others, either at home or abroad.

This methods course should also help the students to plan a course of study in these home economics studies for sixth, seventh, and eighth grades which will be based on other industrial studies of the preceding years, and should teach them how to arrange a course which will introduce studies of value to the children along these various lines suggested, so that some unity of thought and purpose in this study may be maintained (see suggestions for courses for elementary schools, page 91).

To sum up, then:

The normal training course in Home Economics should be taught in such a way as:

(*a*) To indicate the scope of the subject matter without loss of thoroughness in the teaching of fundamental principles.

(*b*) To enable the student to select from the types of material presented the theory and practice best adapted to the needs of the children to be taught.

(*c*) To show the importance of unifying rather than differentiating the various phases of Home Economics.

(*d*) To emphasize the opportunities for correlation with other subjects in the curriculum and with the interests of the homes and the communities.

(*e*) To show the students the value of live problems as the basis for organizing the course.

3. Home economics studies for the girl choosing the general course in high school.

Many girls proceed from elementary to high school with a very vague idea of the meaning of a high school course or the desirability of one. They often think they may or may not proceed to college. With this uncertainty of purpose parents and advisers are apt to suggest the rather general type of high school course for these girls. It is a "trying out" time, for this girl and her interests and "dominant purposes" may emerge rather slowly. The high school courses should be flexible enough in their arrangement to permit her to change her objective when necessary.

Such general courses as outlined by many high schools of the United States are given various titles, such as the general course,

the home economics course, the manual arts course, etc. This general type of course does not as a rule aim to prepare for college entrance, but provides a rather general education. It is suggested for many girls who cannot afford higher education and who leave school at the end of this period, many to remain at home, either their own or their parents', and others to pursue industrial or commercial occupations of various kinds. Occasionally the general course in high school leads to normal school training. As a rule English, history, and a modern language are required in such a course with some of the sciences. The electives suggested are usually in the field of mathematics, art, and the practical arts. This makes possible rather an extensive program in the home economics studies, which a girl so interested might pursue during the four years of her high school course. In other so-called general courses offered in high school, the home economics studies are required at least during three years.

From 6 to 15 periods a week in home economics studies, including drawing, are offered, and in addition the related sciences, general science, physics, chemistry, biology, physiology with hygiene, and mathematics and economics are possible during the four years. In the addenda will be seen a typical program of this type.

The problems confronting those interested in the organization of the home economics courses for the girl choosing this rather general type of course are very simple compared with the organization of such studies for the girl who has a more limited amount of time in which to pursue this work. This education in Home Economics should enable the girl to share the home responsibilities intelligently and to take her place in community life as a promoter of its welfare. What studies does this girl need to enable her to render this service to home and community is the problem confronting the organizer of such a program for girls. The responsibility of choosing these studies rests with the organizer, as the worth and value of all of the home economics studies are weighed in relation to this girl's needs.

*Suggestive sequence of home economics studies for the four years of this general type of high school course:*

*Time. 6 to 10 periods per week.*

*First year.* — This is the year when the girl entering high school is beginning to become adjusted to what might almost be called a university system of work. She feels lost, as it were, and must find her place and relationships. One of the most helpful things that can be done at this time is to present to her suggestions for possible avenues of study. She is beginning to formulate plans for the future, and begins to think about choice of studies, courses, and particular objectives for life work and service. Such a series of lessons might be outlined as part of one of the home economics courses in the first year, or presented at the regular assembly hour to the whole school. It might be given to the girls of the first year only by the vocational adviser of the school or the home economics teacher, if she is prepared to offer such assistance because of her interest in vocational opportunities through home economics work. This guidance will be of inestimable value to the girl and save time and energy as she plans her high school course. Suggestions have been given on page 133, which may be of value in outlining this unit or series of lessons, whether it be offered as a part of the home economics work or in some other way. It should suggest not only the possible avenues and fields of opportunity open to the high school girl trained in Home Economics, but various possibilities of an industrial, agricultural, commercial, and home-making kind for which the high school may prepare. It might also suggest the particular introductory courses in high school which will prepare for further training after the high school period, in technical fields such as nursing, or business, normal training, etc.

Some of the studies of the first half year may be devoted to garment construction and textile study. Garments for children, for day nursery use, asylums, homes for the aged, may offer opportunities for practice in stitches, processes, use of sewing machine, patterns, etc., depending on the previous training and experience of the girls in sewing and textile study in the elementary school. Even though no previous work may have been taken in the elementary school, this will afford opportunity for instruction,

either new or supplementary, in this aspect of the home economics work.

During the second half of this first year a general survey course in Home Economics may be offered to advantage. This might be arranged so as to cover some of the topics discussed on pages 130 and 132, Home Economics I and II. This survey should give the girl an idea of this field of study as a whole which she will take up more in detail in succeeding years. Should she be unable to continue her high school course she will at least have had the elements in this field of work and perhaps an incentive for further study. If she has had little home economics work in the elementary school, this will serve as a review and an introduction to what is to follow. This survey course, with the vocational guidance work offered during the first half year, should start her on her high school career in a more intelligent way than most high school girls begin.

*Second year.* — During the second high school year all of the first half may be profitably devoted to work in food preparation. This should be based on the introductory manipulative work of the grades, and the general science course of the first high school year. The high school work in foods, however, should be closely correlated with the sciences being taught, and the home economics teacher should be so familiar with the studies offered in the related courses in science that she will " tie up " the particular information given in her classes with that offered in the science laboratories, as the science teachers should with the subject matter being offered in the home economics laboratory.

The meal should form the basis for work during this half year, and the food preparation, while similar to that offered in the elementary school or in the survey course, should be more closely tied up with the sciences. The number of foods prepared may be more extensive and include many new dishes for breakfast, luncheon, and dinner. Suggestions for serving should also form a part of this half year's work, and should bear a relationship to the art course in choice of dishes, simplicity of table decorations, color schemes, etc. Marketing, care of food, conservation of

foods with use of substitutes in food preparation, and nutritive values should all be introduced from lesson to lesson in a natural way, as there is need and motive for so doing.

During the second half of the second year more detailed work in clothing may be offered. This should be closely related to the design courses and should have as its aim to teach the girl how to dress attractively and suitably for all occasions, keeping in mind the conservation and economical use of clothing materials. This course should include construction of personal garments, such as kimonos, middy waists, shirt waists, simple one-piece cotton dresses, wool skirts, etc. Whenever possible the use of made-over materials should be encouraged. Darning of stockings, patching and mending of clothing and household linens, such as gloves, underwear, table linen, etc., may be provided for by having a mending day or a mending hour once or twice a month, when such problems may be discussed and the necessary instruction given. Running parallel with the laboratory classes in construction of garments may be offered a course of at least one period a week in discussion and study of textiles, their kind, use, cost, and conservation.

Whenever possible the home economics teacher should coöperate with the art teacher, and the sequence of problems should be discussed so that foresight may be exercised and the designs and patterns for the garment problems discussed in the art classes.

*Third year.* — During the third year it is possible to offer to advantage a course on the home, its selection, furnishing, care, and management. The home economics work of this year may be devoted to this study, with a discussion period running parallel to the laboratory classes throughout the year. The girls are prepared by this time to take an interest in the conduct and management of an apartment or practice house. If possible such equipment should be utilized in the working out of the details of such a course. The following lines of thought may be introduced in such a course, the discussion work being planned for during the single period, and the laboratory practice running parallel to it during the double periods.

## OUTLINE OF SUGGESTIONS FOR COURSE ON THE HOME

| *Discussion Period* | *Laboratory Practice* |
|---|---|
| 1. Ideals in selection.<br>Standards of living.<br>*a.* Location.<br>Relation to work.<br>Relation to schools, play for children.<br>*b.* Selection in relation to one's income.<br>Light, heating, exposure, air, sunshine, decoration.<br>Needs of family group. | Excursion to see certain possible apartments or houses as discussed.<br>Visits to homes, where certain principles are illustrated.<br>Coöperation of art teacher in working out color schemes in laboratory, for walls, ceilings, textiles, etc.<br>Selection of furnishings with thought of certain amount of money for use in furnishing each room. If actual excursions cannot be taken for selection of articles visits can be made to furniture or department stores, or articles ordered from catalogues. Notebooks with clippings of magazine furniture may be made if no other way is possible. |
| 2. Decoration and furnishing of the home.<br>Finishing of floors, woodwork, ceiling.<br>Wall colorings.<br>Kind, sanitation according to use and exposure.<br>Furnishing of various rooms.<br>Bedroom.<br>Bath.<br>Living-room.<br>Dining-room.<br>Kitchen.<br>Hall. | |
| 3. Care of house. *b. Outside.*<br>*a. Inside.* Porch.<br>Walls. Grounds.<br>Floors. Cesspools.<br>Furnishings. Barns, etc.<br>Furniture.<br>Beds.<br>Rugs.<br>Brass.<br>Silver.<br>Glass.<br>Kitchen.<br>Cellar and other rooms. | Housekeeping problems in care of metals, glass, varnish, woodwork, rugs, etc., worked out in laboratory. Cleaning of certain rooms, making of beds, daily care, methods of procedure, etc. Care of cellar and all of rooms of house. |

| | |
|---|---|
| 4. Management of home.<br>System of work.<br>Daily order.<br>Division of income.<br>Family budget.<br>Service in home.<br>Paid.<br>Coöperation of members of family.<br>Upkeep and repairs.<br>Laundering of personal and household linen. | Making family budgets, also plans for division of labor in making out various schemes for work in the home.<br>Laundering of household and personal linen.<br>Use of labor-saving devices.<br>Repairing of household furnishings, varnishing, etc. |
| 5. Hospitality and entertainment in the home.<br>Meaning of hospitality.<br>Simple entertainments.<br>Music, reading in the home.<br>Simple excursions, picnics. | Serving simple meals or afternoon teas for Red Cross or school festivities.<br>Use of library for suggested reading. |
| Discussion of the relationship and duties of the members of the family to community and civic interests, as church, clubs, social service, Red Cross and charitable activities. Suggestions for possible ways of service. | |
| 6. Care of the baby, sick and old people in the home.<br>Care of the sick.<br>Some ways in which girls can be of help in home nursing.<br>Personal hygiene. | Demonstrations in care and bathing of the baby.<br>Preparation of food for baby.<br>Preparation of simple dishes for invalids or old people.<br>First aid, care of bed, bedroom of sick, etc.<br>Demonstration and practice. |

This course could be worked out in two parts of three units each half year. The first half might be devoted to the study of the selection, furnishing, and sanitation of the home, and the second half to the management of the house and care of the members of the family. The girls should be made to feel that they can

contribute at once to the welfare and happiness of the family group, and that it is not necessary to wait until they have homes of their own to utilize the knowledge learned in this course. If a system of credit for home work along the various lines of housewifery and management can be arranged it will be found an advantageous way of checking up the knowledge gained in the school laboratory. In the home-life high schools of the South, and in communities where the pupils come from a distance and board near the schools, it is possible to work out a series of practice houses which will afford opportunities for all of the home-work outlined to be put into daily practice. Care must be taken, however, that the teacher in charge of the home economics studies at the school does not have the double duty of teacher by day and matron and manager of the practice houses at night. It is impossible for one woman to do both well. Care must also be exercised in planning the work of the students, as it is impossible for a girl to attend to all of her school studies and at the same time to the home duties for a group. If a system of work is planned, it will be possible during one term of the third or fourth year for each girl to carry a somewhat lighter program at school in order to have time for the household work. School credit should be given for this work.

*Fourth Year.* — By the time the girl reaches her fourth year in this general course, she is prepared through the sciences and the home economics studies for a more detailed course in dietetics as related to the home. If this can be offered in relation to a real problem in living in a practice house, so much the better. The girls can then plan the meals and do the marketing, and work out the quality and quantities of foods necessary. This course should include the feeding of children through the various stages of growth, planning of dietaries based on the 100-calorie portions, with calculation of the caloric value of foods and food combination. Type dishes can be prepared suitable for diet in certain common diseases.

During the last half of the fourth year a course in "Home Problems" can be worked out which will offer the girls further practice in the studies which have been taken during the first three years. This half year may be divided into three units. In planning

the studies for this general course in high school, at least seven hours per week should be devoted to the home economics studies. Ten hours per week has been kept in mind in making the following suggestions:

*Unit I. Millinery for Home Use*

Five weeks of ten hours per week. Making of simple hats.

*Unit II. Home Problems in Conservation of Clothing*

Five weeks of ten hours per week. Remodeling of clothing, utilization of old materials, which have been laundered at the school or freshened for use. Trimming of old hats, remaking, use of old materials in cutting down and making of garments for children, use of old shirts, stockings, underwear for small garments or household mops, dishcloths, holders, etc.

Choice may be made of one of the following units during the last third of the year, if the staff is large enough to permit the several lines of study to be offered.

*Unit III. Child Study and Care of Children in the Home*

Five weeks of ten hours per week. This course is planned for the girl who will soon become a home-maker, in order that she may understand the characteristics of children and also her own development during the formative period. The influence of heredity and environment and the emotions and habits as they emerge in the development of the individual should be discussed. During part of this course opportunity should be offered for practice at a day nursery or orphanage or through social service organizations, in the care of the baby; also opportunity for practice in feeding babies, preparation of modified milk, and in preparation of food for older children based on the study of dietetics during the first half of the fourth year.

*Unit IV. Making the Graduation Gown*

Five weeks of ten hours per week. In this course opportunity should be offered to the girl who wishes to make her own gradua-

tion dress to do so. Simplicity should be the keynote,—simple design, simple decoration, simple, inexpensive materials. The dollar dresses made by one graduating class recently may well be copied, although they may of necessity be two-dollar dresses to-day because of advance in prices of materials. The girls should plan designs, purchase, and execute this work, based on the instruction received in second year. This should be in the nature of a test of ability and conducted under the direction of the teacher.

*Unit V. The Home and Citizenship*

Five weeks of ten hours per week. This course should show the girl her relationship to community and civic interests. Field work should be arranged. It should be based on the discussions of the third year and her study of civics and economics. She should be led to see the relationship of the home to national welfare through discussion of the economic problems of the community, state, and nation.

There are many good courses in home economics being offered in all parts of the United States which fall within the general classification offered at the beginning of this discussion, as general in character. The home-craft course offered at the Wadleigh High School, New York, is rather typical, as is also the course at Hollywood High School, Los Angeles, California; the general course of the Springfield High School, Springfield, Massachusetts; Philadelphia, Pennsylvania, home economics course, and others in many sections of the country.

4. Home economics studies for the girl choosing any one of the technical or vocational courses in high school:

(*a*) Vocational commercial course.—The girl who enters high school with the intention of becoming a bookkeeper, stenographer, or typist chooses the vocational commercial course, because she knows that at the end of three or four years she can secure a business position. This course usually includes filing, office practice, and the regular studies of stenography, typewriting, and bookkeeping, in addition to the prescribed academic studies, with penmanship, commercial arithmetic, etc.

In some high schools girls choosing the commercial course elect the field of salesmanship as the business course, instead of stenography. This field of work is increasing in popularity, as is illustrated in Boston, where 475 were graduated last year from the salesmanship department of the high school. This course includes, in addition to academic studies, training in department store work, business principles, and practice in various stores in selling goods. The girls are made to feel that this work can be a profession rather than drudgery, as it is so often counted. The store work is no longer routine, but the girls see the relationship of this work to a larger life in all directions.

In these various phases of commercial work, the girl choosing one of these lines of specialization has as her major interest stenography or salesmanship — a business career. She takes the academic studies because they enable her to do her work more efficiently and they are directly related to her needs. The girl has other needs just as vital, as for instance how to live wisely and healthfully, what to eat in order to be most efficient in business life, how to clothe herself appropriately as a business girl, and how to divide her income most wisely and effectively in order to secure the greatest satisfaction. The commercial high school course should provide also for this need of the business girl, and should offer such units in home economics studies as will be adapted to her needs and interests. On page 129 suggestions are made for certain units of work in Home Economics. The program of the commercial girl should be so arranged that some time during her three or four years of high school study it is possible for her to take at least three of these units. The units as suggested on page 129 were planned for the girl preparing for college who has a limited amount of time for the work. The commercial girl is preparing for business and also has a limited amount of time which can be devoted to home economics studies. In both cases it would be well if the work could be a definitely prescribed part of both courses. While the time of girls in both of these groups is limited, their interests differ. Both groups of girls might be taught in the same sections of the suggested units if the high school is not large enough

to permit of differentiation in relation to the interests of two groups; but the applications of work should be suggested according to the needs of the girl going to college and the girl entering business life, in relation to the selection of food, clothing, dwelling-place, and the right use of money.

(*b*) Vocational agricultural courses (see page 209, Courses of study for rural schools).

(*c*) Vocational home-making course. — The vocation of home-making is a complex occupation and includes many duties. If one stops to analyze the tasks practiced by the wife and mother in the home they are very numerous. She is cook, seamstress, house decorator, manager, financier, counselor, nurse. The duties include the care of the sick, the training of children, the purchase of foods and their preparation into meals, the purchase, care, and repair and often making of clothing, the furnishing of the home, the plans for spending the family income, — in fact hers has been called an "undifferentiated job," and one which requires all the patience of Job.

The vocational home-making course in high school has, then, as its aim the training of girls in these many duties as practiced by the wife and mother in the home. The home-making course will be offered in the high schools of the future for those not attending the regular vocational home-making course of four years, in short units, either during the day or at night, and will be taken by the older women and young married women as well as by high school girls. Both elementary courses and those advanced in character will be offered in order to meet the needs of those attending. The high school of the future will offer to girls who expect to be married soon an intensive one-year course of training in home-making.

The discussion here deals with the vocational home-making course as offered to the girl in the four-year high school. The girl who will choose this course does so very often because she is domestically inclined or because she knows she does not care to continue her studies beyond the high school period. Many high schools of the United States have offered courses in Home Economics which have included the many studies outlined for this training in home-making.

In fact the high school course elected by the girl as the general, and often called the general course or home economics course or manual arts course, includes these various branches. The variation made in the new type of vocational home-making course is that it will offer not only a greater differentiation of courses but more opportunity for practice in the use of the knowledge gained. It is true that in many high schools the major, called the home economics course, has included some practice in managing a home in a practice cottage or apartment; but it is quite certain that in the vocational home-making course in the high schools of the future this will be a very important and distinctive feature. The girls choosing this course will reside in the practice house for a certain period of time and have opportunity to practice the knowledge gained in the laboratory courses. This is being done to-day in some of the farm-life schools of the South and in certain localities in Minnesota and Wisconsin.

The homes of the high school girls offer a natural laboratory for practice, and if plans and arrangements can be made for sufficient supervision by the teaching staff, a system of work in the homes with school credit can be arranged.

The Smith-Hughes Act, passed in February, 1917, provides for training in vocational home-making. According to the terms of that bill, in cities of 25,000 or over, those choosing the vocational home-making course should devote one half of the day to the vocational subjects, such as

Food Study, Cooking.
Home Furnishing and Decoration.
Textiles and Garment-making.
Child Care.
Household Management and Housewifery, etc.

The other half day must be given to the non-vocatioual and related subjects:

| | |
|---|---|
| English. | Physical Training. |
| History. | Mathematics. |
| Language. | General Science. |

| | |
|---|---|
| Chemistry. | Drawing, Design. |
| Physics. | Industrial History. |
| Hygiene. | Vocational Arithmetic. |
| Music. | Civics and Citizenship Training. |

In cities having a population of less than 25,000, the related studies such as chemistry of the household, industrial arithmetic, household physics, etc., may be offered during the half day devoted to the vocational studies, while the other half day may be used for the more strictly academic studies of English, history, etc. This means that in the larger cities more time can be devoted to the vocational lines of work, if so desired, in fact half of the time may be used for this purpose.[1]

The following suggestions are offered for planning the vocational home-making work, where half the time for four years may be devoted to vocational and related studies, about fifteen hours per week. In the courses suggested on pages 141 to 150 the following outline has been suggested for the girl choosing the general or home economics course of four years. The vocational home-making course might be outlined in a similar way with some variations to allow for more practice.

| | |
|---|---|
| *First Year.* | Elementary sewing. |
| | Practice, garments for refugees and for others. |
| | Survey course in Home Economics. |
| | Vocational suggestions to aid in planning high school course or later training. |
| *Second Year.* | Course in food preparation. Serving, conservation. |
| | Course in garment-making. Design, conservation. |
| *Third Year.* | Course on the home. |
| *Fourth Year.* | Dietetics applied to home. |
| | Home problems. 3 units to be chosen. |

In the vocational home-making course one semester of the last year should be so planned that the girl has opportunity for practice either in the school practice house or in her own home under

[1] See Bulletin 28. Home Economics Series. Home Economics Education, No. 2, Federal Board for Vocational Education, Washington, D. C.

supervision. This might be planned for either the first or last semester of the course as outlined above; the students being divided into two groups so as to enable them to pursue the course in dietetics during one half year. While engaged in practice work a girl should choose only one or two units of the home problems suggested.

Another possible variation is to offer, if it seems advisable during the first year, a course in food preparation instead of the survey course. While this is possible and sometimes desirable the survey course of the first year gives the girls an insight into the whole field which is very profitable and enables the girl to see the relationship of all the studies to the home economics work. It is true, too, that many girls leaving high school at the end of the first or second year will have a distinct advantage if such a course is offered, for it will undoubtedly act as an incentive for further study along some of the particular lines found to be of interest, or be of value to them in their daily lives if no further opportunity for study is possible. There is of course an obvious repetition in the home course offered in the third year for the girl who remains to complete the four years of training, but this year's work should be fuller with more laboratory practice than that offered in the survey of the first year, and is possible of many variations.

It should be constantly borne in mind, however, in planning courses of training in vocational home-making that the theory and practice of the work at school should be applied directly to the problems of the home and that the girls should be given opportunity for initiative in planning and conducting the home work.

Another thought which should never be forgotten by those planning such courses is that the girls are preparing for home-making and throughout all courses the thought of the home, its atmosphere, standards, and ideals must be of the highest and purest and be kept constantly before the minds of the girls in their plans.

Attention is called to the excellent four-year course in home-making, to be found in the Addenda, which is given at the Worcester Trade School for girls. Miss Hildreth, the director of this school, has found it feasible in this locality to offer a four-year course

in home-making although given in a so-called trade school for girls. A practice cottage is conducted in connection with this course and all the work of the years is so planned that after completion of four years the graduate will be able to enter wage-earning occupations which are outgrowths of Home Economics if she does not at once become a home-maker or work in the home of her parents or others.

(*d*) Vocational industrial courses. — Each recurring census shows an increasing number of women in wage-earning occupations. In Part I, page 60, some of the statistics are given. The war has undoubtedly opened some fields of work to women which have been closed in the past. Industry has been made so inviting to girls of high school age that many have left school attracted by the high wages or have been forced into industry through the necessity of the home because wage-contributing brothers have been called to the service. Teachers of all subjects should take it upon themselves as a special duty to persuade girls whenever possible to complete a full high school course. This is especially vital because the women of to-morrow will have many new problems of reorganization to meet and must be educationally equipped to handle them.

The majority of girls cannot remain for a full high school course and avail themselves of training which will prepare for wage-earning. The high schools of the future will offer short courses of one or two years of intensive training in preparation for wage-earning in industrial pursuits as well as short courses in preparation for commercial business life.

It should be borne in mind that "more education pays." The following page from Pamphlet 270, January, 1917, published by the National Child Labor Committee, 105 E. 22d St., New York City, shows this value of a high school course in wages earned, and argues for industrial training in school for those who are so inclined and expect soon to enter wage-earning industries because it is impossible for them to pursue a long school course. The illustration portrays graphically the advantages to be gained.

### More Education Pays [1]

| | | |
|---|---|---|
| The United States Bureau of Education says a high school graduate earns on the average | $1000 yearly, 40 years (18 to 58 years) | = $40,000 |
| A poorly educated workman earns on the average | $500 yearly, 44 years (14 to 58 years) | = $22,000 |
| Increased earnings of the high school graduate, due to four years (720 school days) of additional schooling | | = $18,000 |

*Then each additional day spent in school adds $25 to his life's earnings.*

| Age | Wage per Week | |
|---|---|---|
| | Untrained Worker | Trained Worker |
| 14 | $4.00 | (in school) |
| 18 | 7.00 | $10 |
| 20 | 9.50 | 15 |
| 22 | 11.50 | 20 |
| 25 | 13.75 | 31 |

*At 25 years of age, the untrained worker has earned, on the average, only $9 per week; the trained worker an average of $19 per week.*

### It Pays to Stay in School

Vocational industrial education for girls between the ages of 14 and 18 may be of various kinds, such as training for the art industries, in metal, wood, textile and costume design, and illustration; training for skilled machine operating, novelty work, and industrial work in connection with food preparation, and the clothing industries of dressmaking, millinery, and others. This

[1] *More Education Pays*, Pamphlet 270, 10 cts. Syllabus for the Use of Teachers National Child Labor Committee, 105 East 22d St., New York City.

text is concerned only with the discussion of those vocational industrial courses in high school which are the outgrowth of the home economics studies; they are briefly those industries which are concerned with the manufacture of clothing and food materials into articles of greater value.

The following four points should be borne in mind in planning any type of vocational industrial course in high school, whether the courses deal with art or other industries or are those which grow out of home economics studies.

1. That all girls entering industry, no matter what line of specialization may be chosen, need some instruction in the home economics studies, and provision should be made for these in their courses as well as for English, arithmetic, civics, and other studies. It is true that but a limited amount of time can be given to Home Economics as such, when the goal is industry, but it should not be omitted. It can be touched indirectly through other studies, as personal hygiene and care of children, through the physical training classes; study of the budget and textile study through the mathematics and English courses; and some study of foods through assistance given in the school lunch room, supplemented by instruction during special periods or even in the English class in composition. This means close coöperation on the part of teachers.

2. That no matter what special vocation of an industrial nature may be chosen in high school, *opportunity should be offered for practice.* The girls choosing art should find opportunities through avenues investigated by their instructors for the use of the knowledge gained. This may be possible in "in and out" work in the third or fourth years when part of their time is spent in school and part in industry. This may be the plan also for opportunities for shop work in dressmaking or in catering where food is produced in large quantities for sale in a school shop or for lunch room use.

3. That all girls need some studies for their "spiritual as well as material advancement." When the high school vocational industrial course of three or four years is chosen other studies besides the industrial should be prescribed, although it must be kept constantly in mind in making plans for industrial courses that the

girl has a fixed goal of preparation for wage-earning in a particular industry.

4. That no vocational course should be offered unless there is a community demand and a place in industry where girls can find employment after completing this course. A good illustration of a survey made of the industrial needs of a large city and the adaptation of school courses to meet those needs may be found in the Minneapolis Survey, or that for a state, in the Indiana Survey.[1]

The following suggestions are made for *all* girls choosing the vocational industrial courses in high school without regard to specialization.

On page 129 will be found outlined certain units of study in Home Economics. While these were outlined for the girl preparing for college they are suggestive and capable of adaptation to the needs of the girl who stays three or four years in high school but who will proceed to business in some line of industry. It is such units of work which all girls going into industry need, and the work outlined, while brief, will give the girl going to business a good foundation for future study and an intelligent understanding of home problems. They will also be of help to her in daily living in choosing her food, clothing, and living place, and in the wise spending of her income.

Suggestions for specialization in:

### *Vocational Industrial Courses in High School which Are the Outgrowth of Home Economics Lines of Interests*

It is true that the general home economics training given in the elementary school or in the first high school year may have aroused interest in a special line of wage-earning connected with this study, and that this is often pursued later in high school.

It is suggested that when a vocational industrial course is chosen in high school at least half of the school time should be de-

[1] Minneapolis Survey, published by the National Society for Vocational Education, 140 West 42d St., New York City. Indiana Survey, published by the National Society for Vocational Education, 140 West 42d St., New York City.

voted to the technical line of specialization chosen. Those industrial studies which have grown out of the home economics work are connected closely with either foods or clothing. The needle trades have been largely taken from the home. The food industries have passed from the home more slowly than the clothing. There are many high schools of the country offering good vocational industrial courses in clothing and a few which are considering the vocational aspects of the food studies for high school girls.

This specialized study should not begin before the second or third year and during the first two years opportunities should be given the students to try several different lines of work before deciding upon their specialty, so as to give them a view of some of the various opportunities and to make it reasonably sure that the work chosen is the best suited to the needs and capabilities of each particular student.

The equipment should duplicate that to be found in any well-equipped workroom representative of each of the several industries — power machines for dressmaking, steam tables and hotel ranges for cooking, power washing machines and electric irons for the laundry.

The courses offered should duplicate as far as possible trade conditions, such as repetition of processes for skill, speed, quality of workmanship, hours of work, etc.

Some of these vocational courses are practicable only in the large city high school, but adaptations can be made to meet local conditions in the smaller cities.

In all of these courses business management and business method should be taught. Opportunities for practice should be furnished during a part of the course in the school laboratories, but during the last year other opportunities outside the schoolroom in actual establishments should be provided, such as in the "in and out" system approved by the best vocational schools of to-day.

The greatest problem in establishing vocational industrial courses is to find the proper teacher. It is difficult to find one who is

equipped with the necessary practical experience and who at the same time has sound educational principles to guide her in the teaching of her subject and her pupils. "Whether it would be better to put a trained teacher into a shop or lunch room, or a woman with practical experience into a training school is an open question, and so, as always, we turn to the ideal teacher as the only solution of the problem before us. Home Economics will not have its full vocational value until the teacher has a scientific foundation, practical efficiency, and good teaching method, and is heartily supported by the school boards of the land."

A. *Clothing Courses:*

The vocational course which has been more highly developed than any other in high school is dressmaking. At least half of the school day should be devoted to this work. Attention is called in the Addenda to the courses offered by the Los Angeles High School; the Worcester Trade School courses of four years in dressmaking; and the Boston High School of Practical Arts. The Washington Irving High School of New York City offers a three-year technical course in dressmaking where opportunity is "offered for shop practice in certain near-by dressmaking establishments."

The aim of most high school courses has been to train the girl for home dressmaking and as a rule no shop facilities for practice have been offered. It is highly desirable that practice either in a school shop where orders may be taken for faculty or parents, or opportunity for pupils to work in near-by dressmaking establishments should be provided by the school.

The following general suggestions are made for courses offered to girls choosing the vocational industrial courses in dressmaking or millinery:

*First year.* — In addition to the academic studies of English, history, general science, etc., some units of study in Home Economics as suggested on pages 129 to 136 should be offered. These are of such a nature that the girl will be given opportunity because of such units to choose her special line of vocational work more intelligently and she will get ideas in relation to general house-

wifery, cooking, sewing, earning, and spending money which will be of value to her throughout her course. When the course covers four years, specialization in any one line of industrial work is not advisable until the second or third year.

*Other three years.* — Dressmaking or millinery at least 10 hours with supplementary art of 4 hours in color design, etc., and 1 hour of related textile study.

*a.* Dressmaking.

*Second year.* — By this time the girl should have as a basis for work all the stitches and processes which are used in the construction of such garments as underwear, aprons, clothing for children, kimonos, etc. The use of the sewing machine and commercial patterns should be reviewed and if necessary taught with practice on the above articles during the first half of this year. The need for garments for the poor presents a real problem at this time and Red Cross sewing offers excellent practice.

The second half year may be used for dressmaking of a preparatory nature such as simple dresses and uniforms of cotton materials, plain shirt waists, skirts, and middy blouses. A little drafting should be introduced here in order that the girl may learn to interpret patterns and may see more clearly the relationship of the lines of the pattern to the human figure. This study of interpretation and relationship to figure leads naturally to the free making and use of patterns in drafting and draping.

*Third year.* — The aim should be to make the girl useful as an assistant in a dressmaking shop. Custom work on orders should be done if possible on such articles or garments as were made during the second year. Visits to shops on opening days with discussions of styles as studied in their origin in the costume history and design course will prepare the way for the fourth year of work. In addition work on skirts of wool, woolen or silk dresses may be undertaken with the making of the necessary designs in the related art work. Suggestions for pattern-making and change of patterns should be given. Remodeling of garments brought in by pupils or others, with mending, laundering, renovating, and repairing, should form a part of this year's work. The related textile work

should introduce the repair and renovation in the study presented of weaves, prices, kinds of materials, and the effect of hot water, etc., on silk and wool in laundering.

*Fourth year.* — Aim to prepare the girl to work more freely so that she may have sufficient confidence in herself and enough initiative to work as visiting dressmaker or to work at dressmaking for customers at home if she does not wish to enter the dressmaking establishments of others. Work in shop practice should be offered with opportunity for simple cutting, fitting, draping, and making of patterns; at least half of this year should be devoted to shop practice.

*b.* Millinery.

Millinery is a short-season trade and any girl choosing this course because of talent or particular aptitude and liking for it should choose some other line of interest to supplement it in order that during the slack seasons she may not be out of employment. The trade offers many attractions for those with artistic impulse for this work. To be successful a combination of art and skill is desirable and almost necessary. The making and trimming of hats includes many mechanical processes and good technique is required, but neither avails unless an artistic hand contributes to the result.

At the Boston High School of Practical Arts the pupils who specialize in millinery are permitted to elect two periods in salesmanship as a complementary major during the second, third, and fourth years. This enables the girl to fill stock or selling positions in the store during slack seasons in the millinery workroom. A study is made of textiles which will enable the girl to sell them intelligently and which will acquaint her with the problems of labor, marketing, and transportation in manufacture. The department store is studied and its organization and system taken up, so that girls are prepared for the positions of stock girls, cashiers, etc. Demonstration sales are held so that good and bad methods are discussed and subjects are introduced such as minimum wage, Consumers' League, etc., which awaken in the girl a new attitude of mind towards such work.

As millinery is based on simple sewing it is wise to offer also in the second year a course suggested for the first half of the second year under dressmaking, as this may offer an avenue to the girl who does not care for salesmanship to gain employment during dull seasons, in shops where novelty sewing such as lamp shades, house furnishing work in making of slip covers, etc., may be done. The survey of any locality will determine what should be the accompanying line of interest.

*Second year or third year.* — Practice in sewing as suggested under dressmaking, second year. The aim of the work in millinery during the second and third years should be to train the girl for the many lines of preparing which are required of a milliner's assistant.

The work of this year should include the making of bandeaux, frames of buckram and wire, covering of frames; putting on facings and bindings, making of ornaments of materials. The art and textile instruction should be closely related in their study of materials, kinds, prices and in color, line, and becomingness of hats to certain types of faces.

*Third year or fourth year.* — More practice in making and covering buckram and wire frames of various styles, for winter and spring. Study of shop practice and styles in class discussions.

Remodeling of hats, renovation of materials based on the study of textiles, utilization of old materials and suggestions for conservation.

Study of novelties in hat making as offered by the season.

*Fourth year.* — Work with fur, crêpe or nun's veiling and net, in making of winter and summer hats for motoring, garden hats of net, lingerie, etc. Discussion of cost, prices, computing value of the finished work, labor, overhead expenses, etc.

Discussion of trimming by specialists brought to the school. Opportunity for practice in making bows, finishings, etc., in trimming. Shop practice for at least half the year when practicable in large cities.

Sketching, study of styles, etc., in the art classes should run parallel with this work.

B. *Food Courses and other vocational lines of study:*

It is only within the last five years that any attention has been given to what might be called the development of commercial cookery and housewifery in the vocational departments of high schools. Until recently there have been greater opportunities for girls in the fields of clothing than in that of foods, for high school girls have been considered too immature to undertake lunch room work or catering. However, the increasing number of small tea rooms and catering establishments has created a demand for trained assistants to tea room and lunch room managers and caterers; and high school girls can be fitted for such positions. At times a decided taste and talent for some specialized form of food work is discovered, such as candy-making, jelly-making, or canning fruits and the pupil may be helped to develop this particular interest. While these industrial pursuits may not be considered strictly home economics subjects, yet they are so closely related to them by reason of the subject matter and materials handled that they are sometimes considered as coming under the jurisdiction of the home economics department of work. Catering, tea-room assisting, or some form of specialized food study as candy-making, specialization in housewifery branches as laundering, etc., may also be considered here.

For any of these types of occupations a strong basis in science is desirable but it should be the science applied directly to the materials the pupils are using and to the needs of the industry they are studying. A knowledge of marketing and buying, the nutritive value of foods, the balanced menu, and other phases of dietetics, should form a part of the program for the girl whose occupation will grow out of the work in foods. Quantities prepared should be such as would be practicable in establishments of the type studied and skill, accuracy, and speed should be acquired.

Fine laundry work such as the laundering of fine shirt waists, lingerie of all kinds, laces and embroideries offers another field of vocational industrial opportunity that may be developed for this young girl. With very little equipment this occupation could be carried on in the girl's own home, a decided advantage oftentimes.

Art needlework, embroidery, crocheting, and knitting are special phases of home economics work that have proved profitable to many. A clever person who anticipates the needs and whims of fashion and fancy is well paid for her originality and skill. Gift shops in cities and summer places give ready sale for good work. This type of work may be combined with tea-room management and the two prove a source of good income. In certain large cities, major work in hand-sewing on fine lingerie may prove a profitable field for vocational training.

The following general suggestions are made for courses offered to girls choosing the four-year vocational industrial courses in foods.

First and second years same as suggested on pages 143 to 145 for the girl taking the general home economics course in high school. This includes in the first year practical sewing review, the survey course in Home Economics, the suggestions in relation to vocations, and in the second year a food preparation course and the making of garments. With this general training the girl is ready for her specialization. Half of the school day should be devoted to this specialization during the third and fourth years. The aim of this course is to train assistants to tea room managers, or caterers, for private catering or specialization in preserving, candy- or cake-making.

The third and fourth years should offer opportunity for advanced cooking beyond that of the second year course as outlined with special attention to serving and preparation of attractive looking foods. Special attention should be given to proper and attractive combinations for formal and informal dinners, teas, breakfasts, suppers, evening parties. Cooking in large quantities with the use of labor-saving devices, institutional equipment, etc., should be begun, either for sale in the school lunch room or in fulfillment of orders from patrons outside the school. A shop in connection with the school is possible where the products of cakes, pies, breads, puddings, etc., may be sold or made to order. This has been done with success and school departments supported through the patronage of their own faculty and students or by

outside patrons. During this year it is possible, if the matter is advertised, for girls to go out for hourly service to prepare and serve dinners or evening suppers to families known to the school teacher or principal, but it should be understood that such service is not expert service, as the pupils are still in training.

Parallel with this practical work should be given courses in canning and preserving, candy-making, and fancy cooking. The subjects of marketing, storage, and care of foods in large quantities should be taken up and the subject of dietetics studied in the fourth year. This should include the planning of dietaries, based on the 100-calorie portions with calculation of the caloric value of foods and certain food combinations.

If it seems wise in certain localities a course in trade laundering for institutions might be offered. There are possibilities in the future for the girl with initiative and a little capital to start this business. She should have business ability and understand how to figure costs. Some college girls have done so with success and have even built up a special laundry business in their own homes, advertising the laundering of dainty waists, dresses, and children's clothes. This has been remunerative and in a certain case led to the employment of help and development of a business. The manager advertised that all was done under most hygienic conditions and the articles when returned to their owners were attractively boxed with colored tissue papers. In certain cities there is always a clientele which will be willing to pay good prices for hygienic, careful, and attractive handling of laundry work.

Graduates of such a special course might take charge of a small laundry in a hospital or other institution or in private homes of the rich which are equipped with special laundry machinery.

This course should include mending and sorting of clothes, removing stains preparatory to soaking; washing of woolens, silks, colored materials, starching, bluing, etc.; care of fine work, also instruction in the care and operation of laundering machines such as drier, extractors, mangles, etc.

If conditions warrant, this might run through the third and fourth years as a specialization.

## Section II

**I. Home economics studies in the junior high school:**

A. *Organization of the junior high school.* — The number of junior high schools is increasing rapidly. In the report of the United States Commissioner of Education for 1914, Dr. Thomas H. Briggs reported one hundred and ninety-three cities as having this form of organization. About two hundred other places were considering the plan. The report of the committee on the junior high school presented to the High School Masters' Club of Massachusetts, March, 1917,[1] will be found an interesting history of the development of this movement. It also contains a good bibliography for those who care to consider more fully the growth and development of this movement in schools.

It has been shown that the mortality of the upper grades is very great and continues in the high school. The conclusions drawn by Drs. Thorndike, Strayer, and others who have made a study of this period is that of one hundred children entering the first grade only about nine complete the high school course. It was due to this mortality that reorganization of studies was suggested for the upper grades, as it was found that interest and the attendance remain rather constant through the fifth or sixth grade. The pupil, if normal, should by this time be in possession of the fundamentals of his education if he has been well taught.

A junior high school has been defined in the following way:

> A junior high school means a grouping of grades seven and eight or of seven, eight, and nine to form a new educational unit in which there shall be some freedom in choice of studies by the pupils, a considerable change in the traditional content of the subjects and methods of instruction, departmental teaching, promotion by subject, and prevocational work.

It is not possible in this text to discuss the advantages to be gained from this form of organization, but merely to show the relation of the home economics studies to this form of organization.

[1] Report of Committee on the junior high school, presented to the High School Masters' Club of Massachusetts, March, 1917. D. C. Heath & Co., New York and Chicago.

The testimonies of many bear witness to its success and the advantages are fully discussed in the report referred to above. It should be kept in mind, however, that in this scheme of organization no loss of academic training is planned, but a better scheme of dovetailing subjects with vocational guidance and preparatory work in trade. This has been called the exploratory period and as such performs one of the leading functions of the junior high school. In the same report are written programs of study which are interesting in that they show what is being done and also the program of studies recommended by the Butte Survey Commission which suggests a certain organization. The program of studies recommended by the Committee of the High School Masters' Club is full and suggestive in showing the time allowance for, although not the contents of, the home economics studies.

It will be noticed that there is great freedom in the choice of electives. One argument offered for this form of organization is that at this particular period of adolescence it is necessary to meet the varying interests of girls and boys which begin to develop at about this time.

B. *The aim of home economics studies in the junior high school.* — In the following studies in home economics suggested for the junior high school it is aimed to give the girls during the 7th and 8th years an insight into the vocations related to the home in order that a particular bent may be disclosed. This will enable the girl to choose her later work more wisely as she will have opportunity to try out other lines of vocational work also in the 9th grade. If she must leave school at the end of the junior high school period, this study may aid her in judging the line of work she may wish to pursue. In the program of studies suggested by the Butte Commission it will be noticed that two courses are suggested for the 7th, 8th, and 9th grades.

I. The General Course.
   Intended primarily for those intending to go to high school.
II. Vocational Course.
   For those not intending to go to high school.

In the program suggested by the Committee of School Masters three courses are offered.

I. Academic Curriculum.
II. Commercial Curriculum.
III. Industrial Arts Curriculum.

In addition a General Curriculum is given which may be offered when the fuller specializations are not warranted.

In the modern movement for the reorganization of the school system upon the 6–3–3 basis, there are naturally to be found two groups of girls in attendance at the junior high school, namely:

1. Those girls who will continue their school work through the senior high school.

2. Those girls whose school training will end with the work of the junior high school. Therefore, in planning the work in Home Economics for the junior high school, provision must be made for both groups; and both groups should be handled in the same sections in the 7th and 8th years, before the girls or their parents are able to decide definitely the possibilities for further education. This work is as fundamental for girls as is the industrial arts work for all children in the first six grades. Specialization and choice of elective studies in Home Economics are not desirable before the 9th grade.

In discussing the home economics studies for the junior high school period it would be but repetition here to fully describe the possibilities for the 7th and 8th grades. They are outlined and suggested in Chapter VI under home economics studies in the elementary schools. All girls, whether they continue their education through high school or leave at the end of the junior high school period, need such studies in Home Economics as are suggested for the 7th and 8th grades of the elementary school. This study includes the subjects of food, clothing, and shelter in their relation to their daily use by the family. It is hoped during this period to give the girl an appreciation of the significance of a normal, well-regulated home with all its activities and the benefits it bestows, as well as the possible relationship of this home to the com-

munity of homes. The content should be based upon those interests and activities connected with the home which should enter into the education of every woman because of the universality of such problems in their lives. The following discussion of the two aims of home economics studies during this period may be suggestive to those organizing work for girls with these goals in mind.

C. *Home economics studies for seventh, eighth, and ninth years for girls who will proceed to senior high school.* — In planning a three years' course in Home Economics for those girls in the junior high school who will proceed to the senior high school the sequence of subjects should be determined by:

(1) The natural interests and powers of the girl in the various phases of the work.

(2) The basis in art, science, and social studies which she has had or may be having upon which the home economics courses may build.

For example, the girl in the 7th year is generally less interested in studying art in relation to herself than the girl of the 9th year; and, furthermore, she has less understanding of the art principles which lie back of such a study than the girl of the 9th year whose art training has equipped her to interpret and apply the effect of horizontal and vertical lines upon the human figure. In the study of foods and sanitation the 7th year girl will be interested in cooking and other household processes for their own sake; but she is not normally so interested in considering the nutritive values of foods and the food requirements of individuals as the girl in the 9th year; nor has she the scientific basis upon which to draw for principles underlying such a study until she has been carefully guided through a course which introduces her into the realm of chemistry and physics of everyday life, as an "introduction to science" course is designed to do.

It seems desirable that at least two double periods per week and, when possible, three, be devoted to the laboratory work in Home Economics and that one or two single periods be provided for discussion; the time to be distributed among the various phases according to the needs of the problems in hand.

It is not the purpose of this book to outline the specific phases

of work to be covered in each year; but merely to suggest the careful organization of a course for the 7th, 8th, and 9th years sufficiently broad in scope and of adequate intensity to render every girl capable of meeting her home problems with intelligence and a consciousness of power.

Furthermore, the course in Home Economics in the junior high school should afford a basis for selecting the phase of work which the girl may wish to pursue in more advanced study in the senior high school. The teacher in the junior high school has as one of her responsibilities the task of discerning skill and special aptitude in her pupils; and of guiding them in their choice of the senior high school courses, which, as will be seen, are designed to train the girls more intensively along the line of their major interest.

As has been suggested, the opportunity for more intensive work in the 9th year along one special line will facilitate this choice of specialized work in the senior high school.

In the organization of this period of work (7–8–9 years), for the group of girls who will take the work in a consecutive course for the purpose of general education, the suggestions offered on pages 114 to 122, home economics studies in grades 7 and 8 of the elementary school, may be expanded and enriched to cover three years instead of two, with the introduction, as suggested above, of more advanced work in all phases based upon the contributing courses in science, art, and social studies.

It sometimes happens that by the time a girl has finished two years of general home economics training, she shows particular aptitude for one line of work rather than another; for the foods or for the textiles — or such lack of interest in one or the other that to continue it would be a waste of time. If the school organization will permit, such girls may be allowed to elect the work of their greatest interest and continue it more intensively through the senior high school than would be possible if they elect both phases. This differentiated course should not begin until the 9th year, as before that year the pupil has not arrived at an age when she is capable of making wise choice, and may include one of the following phases of work:

1. Food and sanitation. — Further application of the principles of cookery gained in the 7th and 8th grades and more specific science and economics through the preparation and service of well-balanced, nutritious meals at varying costs; general household management such as cleaning, laundering, etc., through the care of rooms, furnishings, and equipment incidental to the service of these meals; ideals of hospitality and the relations of hostess and guests through these school exercises.

Practice in large quantity cookery may be given through the school lunch room, this being a possible outlet for surplus products as well as an incentive toward perfect results in the laboratory. It further offers opportunities for the study of costs, large and small quantity buying and efficient business methods. The time to be allowed for this should be at least two double periods for laboratory with one single period per week for discussion.

2. Textiles and clothing. — This is the age at which the girl is most subjective, when she takes greatest interest in her personal appearance, and which offers the richest opportunities for instilling right ideals toward dress and right principles and habits of health and hygiene as influenced by dress. The course then may start with the girl's present interest in her own personal appearance, applying the art principles to costume design and the execution of garments from these designs, making a study of color through what is best for her to enhance her good points and subdue the poor, applying her textile study to the selection of materials and trimmings for these dresses from the point of view of adaptability, durability, and hygiene. The remodeling of old garments would give opportunity for the study of the economics of clothing and the proper cleansing of old fabrics, thus giving a place for the application of chemistry through a study of detergents and reagents. A comparison of the cost of ready-made and home-made garments would give opportunity for discussion of problems of wage-earners, the human cost of ready-made articles as compared with the mere cost of materials, the relations of the family to the day worker in the home, etc.

D. *Home economics studies for the 7–8–9 years for the girl who*

*must leave school to go to work.* — For the girl who must go to work at the end of the junior high school period, some kind of specialized training should be possible during the 9th year. This may or may not be related to the home economics studies, although this book is concerned only with these. Such electives may be chosen as commercial courses in business practice, stenography, agriculture, etc.

The home economics studies of the seventh and eighth grades for this group of girls who must go to work at the end of the ninth year should be pursued by all girls as has been suggested, regardless of the vocation chosen for special study in the 9th year, for every girl, no matter what line of work she may enter, should have an opportunity to become acquainted with at least this amount of the subject which affects her so vitally as a girl and as a woman. The need for home economics work for these two grades is perhaps of greater importance to the girl who leaves school at the end of the 9th grade than for her who may continue in school, for it is not likely that further opportunity will be easily available. The content of the course during these two years should be about the same as that outlined on pages 114 to 122.

*Differentiation* should begin in the 9th year. From 10 to 15 hours per week should then be devoted to the girls' special line of study but the regular academic studies of the 9th year should be continued although the school day will have to be lengthened during this year. The academic studies should be related as far as possible during this year to the special field of interest, as this relationship tends very directly towards making the girl a more efficient person in her chosen field of work. The relation of her major subject to all other subjects studied should be clearly seen and felt and should leave no doubt in the girl's mind regarding their value to her.

It is quite natural that the home economics studies in the 7th and 8th grades in food, clothing, and household management should open up possibilities of vocational interest to girls, which may be pursued intensively during the 9th year. If the girl chooses during the 9th year, for vocational purposes, the vocational industrial

studies related to Home Economics, they may lead to special fields of work in the needle trades, as dressmaking, garment-making, millinery, machine-operating, etc., or to vocational industrial occupations in foods if the course for this ninth year is wisely planned.

The aim of the training during this ninth year is to prepare the girl directly for a special kind of work for "gainful purposes" in order that the girl shall qualify along some line so that the period of apprenticeship may be shortened. The work is in this sense vocational study, and may or may not be related to the home economics field. The vocation chosen may be that of stenographer, office assistant, sales girl, telephone operator, etc. She may prefer to take this training of the 9th year in a trade or business school or in the vocational classes of a four-year high school if the work she wishes is offered.

It must be remembered that the girl at the end of this period of training is not old enough to be more than an assistant or apprentice in any of these lines of work and must start at a low wage. Nevertheless she will have more of general education by the end of the 9th year and in addition the special training which will enable her to advance more rapidly than she would otherwise do in her chosen field of work.

It is essential in this special work of the 9th year that the materials and equipment with which the girl works shall approximate industrial conditions as nearly as may be without duplicating its bad features, and that the student should be expected to qualify in speed and technique in such a manner as will make her a worthwhile assistant in the field of work which she enters.

There will be found in most schools over-age girls in the 7th and 8th grades who must leave school before completing the 9th year. It would often be advisable to permit such a group to follow some intensive vocational study which is being taken by 9th-year girls, but still pursue academic studies of a lower grade. This group will probably be small but provision should be made for it in order that the school may reach these girls, who often marry at an early age.

**II. Home economics studies for the senior high school based upon the work of the junior high school:**

A. *Home economics studies for liberal education.* — Training for liberal education in home economics studies has been fully discussed and content of courses suggested for the students of varying goals on pages 126 to 166. In the senior high school of the 6–3–3 plan will be found students with similar goals, namely:

1. The girl whose goal is the college.
2. The girl who will teach in a rural school after completing her high school course.
3. The girl who expects to remain at home.
4. The girl who expects to enter industrial, commercial, or agricultural pursuits, but who needs some home economics studies as a part of her liberal education teaching her how to live while pursuing her main occupation.

The courses suggested on pages 126 to 166 may be interpreted as covering the needs of the girl in the senior high school. The girl who expects to remain at home should be able to elect strong courses or units if she chooses, and the girl whose goal is an industrial, commercial, or agricultural pursuit, and the girl whose goal is the college should find in the senior high school courses or units in home economics for liberal education which should attract her on account of their intrinsic value for her.

It is urged that an elastic system of courses or units be planned to meet these needs; for example, opportunity should be offered to the girl who wishes to select courses or units during any one or all of the years in her high school course; but, if only one year or its equivalent in units is elected, that one should be a truly valid course in rounding out and summing up the best for the girl in the field of Home Economics at that stage of her development.

If only one year can be added to the work of the junior high school, the eleventh or twelfth year is the wise time for such a final course, inasmuch as the girl has reached her greatest maturity and has the best background in science, art, and economics besides a broader outlook upon life than at any previous time.

If it is not possible to give the full time recommended, five periods per week, for the full year in the 11th or 12th years, and the unit system is adopted, it will be possible for the students to elect certain units in different years and in this way aspects of the work demanding more maturity and serious purpose, such as nutritive value of foods and dietetics, budgets, etc., might be included in the 12th year.

The course as suggested for the senior high school provides a very desirable basis for future specialized training in nursing or other fields. Because of the great need for nurses in the world to-day, the fitness of girls for this training should be carefully considered; for it is often through the home economics course that girls may be led to an interest in nursing.

The high school course may wisely be modified to meet the needs of such students.

Such a program should emphasize academic subjects; should be strong in science (chemistry, physics, biology), and should include as much of the practical work of home economics as would be possible without sacrificing the general cultural and science courses. It should have good courses in cookery, nutrition, household management (cleaning and furnishing, etc.), and household sanitation. Mathematics could be reduced to a minimum for such a student, but she should have a modern language and one year of Latin if possible. She needs the full work in English and history with emphasis on civics.

B. *Home economics studies for vocational training.* — The three years' work of the senior high school in vocational training should be organized in a way similar to that suggested on pages 150 to 166 (for the four years of high school), under home economics studies for the girl choosing any one of the vocational courses in high school. It is suggested that the adaptation of the 8–4 plan to the 6–3–3 plan be made in the 9th and 10th years according to the needs of the girl.

In planning vocational programs or courses of study for the senior high school it is necessary to keep in mind girls with the following aims:

1. The girl who has as her goal *vocational education in home-making* "as practiced by the wife and mother in the home."

2. The girl who is preparing in high school to be a *teacher in a one-room* rural school and must include in her program some home economics studies because she will have to teach them.

3. The girl who chooses a vocational industrial course, — an outgrowth of a home economics study.

The following suggestions are made for adjusting the three years of the senior high school to the programs suggested on pages 126 to 166 for the four years of the 8–4 plan.

1. Home economics studies for vocational training for the girl whose goal is distinctly home-making.

The course outlined in preparation for home-making on pages 152 to 156 may be adapted to the senior high school. Because of additional food and clothing studies in the 9th year or junior high school, some of the technical work of the 9th and 10th years of the 4-year program may be omitted. It is suggested that the survey course as suggested for the 9th year of the 4-year plan be offered in the 10th year of the 3-year plan and also the vocational guidance course if this seems advisable. It is suggested that the plans for 11th and 12th years remain about the same with opportunity for practice as suggested.

2. For the girl who is preparing in high school to be a teacher in a one-room rural school and must include in her program some home economics studies because she will have to teach them.

For this type of student the plan suggested on pages 133 to 141 of the 8–4 plan of organization may be utilized since the subjects to be pursued are given in the last two years of high school and will not be affected by a difference in organization of the school.

3. For the girl who chooses a vocational industrial course, an outgrowth of a home economics study.

As suggested on pages 156 to 166 there are vocational industrial pursuits which are an outgrowth of some of the home economics studies. In the 8–4 plan of organization suggestions were made for the introduction of home economics studies and outlines given for the industrial courses which are the outgrowth of the home

activities. Adaptations of these can easily be made to the 3-year high school course omitting such technical work as may have been taken in the junior high school, 9th year.

III. Home economics studies in the small high school.

There are located in many of the villages and cities of the United States small high schools where only one or two teachers of the home economics studies are employed. It will not be found possible to work out in details some of the suggestions for courses offered in the first part of this chapter, although many of them can be adapted to the needs and conditions of the varying communities. Some suggestions are offered below for this adaptation.

The aims and ideals for introducing the home economics studies have been fully outlined in Part I of this book. The teacher in the small high school should have in mind her aims and ideals for the girls of her community and should plan the course of study with those ideals in mind. She should remember that she has a special privilege which should aid her in organizing the work, her close touch and relationships with the homes of the community which is not easy in large cities. It is possible for her to know the homes of the community and their particular needs through visiting them, and in this way to learn the resources of the community and local conditions, from the angles of many homes. The teacher who bases her course of study on the needs discovered will make the work of true value.

In small communities the home economics teacher has an opportunity to bring the mothers, young housewives, and girls and boys together in clubs for study of special problems of the community, which is not always feasible in large cities. Much civic pride can be awakened in this way and much good done as the teacher finds her place of usefulness outside the schoolroom as well as within it.

In most small high schools the time allowed for the home economics studies averages about two periods a day for two years. The periods vary in length but it is advisable to have periods of at least 45 minutes, so that no laboratory class time is less than 90 minutes. When the periods are shorter there is loss of time in dis-

tributing and collecting materials, lack of economy in presentation and neglect of certain class instruction, because discussion must often be omitted in order to accomplish a given project within the period of time.

On pages 141 to 150 suggestions have been offered for the organization of home economics studies for the girl who takes the general home economics course in high school. She remains for four years and has opportunity for some study in each year. If only two years of work are possible for the girl in the small high school it is suggested that the following subjects be offered as given on pages 130 to 136; without the fuller differentiation as in the other outlines.

*First year.* — 1. Sewing: study of stitches and processes applied to garments and textile study (as suggested for first year of the general course, page 143).

2. Food preparation and serving: meal basis as suggested on pages 144 to 145 including study of marketing, cost; food values, combinations, etc.

*Second year.* — Course on the home, its care and management. See pages 146 to 148. This is made up of six units of work, all of which might be offered or as many as possible.

If the home economics studies must be distributed over four years for administrative reasons, and the amount of time each year must be less, it is suggested that the course as outlined on pages 141 to 150 for the girl taking the general course of four years, be adapted year by year to the needs of the small high school.

Lack of equipment is no excuse for poor work even in a small school, for here more than anywhere if tact is used, it is possible to go into the homes to give instruction, and to utilize the natural laboratories on every hand. There is splendid opportunity for coöperation and school credit for home work. Attention is called to the chapter on courses of study for rural schools and to suggestions for school lunches, lesson plans, and classroom and school management offered in the other parts of this book.

## Section III

**I. Home economics studies in evening classes and continuation courses.**

In addition to the home economics courses offered in the all-day elementary and high schools one finds very often in the same buildings or in separate school buildings classes for those who cannot attend school at all during the day because of home duties or employment. The latter are in some states compelled by law to attend school for from 4 to 10 hours per week between the ages of 14 and 16 years. This compulsory school attendance makes necessary in some of our states part-time instruction in day schools for a certain number of hours each week. The home economics studies as introduced under these varying conditions should have rather different courses from those suggested for the regular high school.

A. *In evening classes.* — There are usually three types of women attending evening classes:

1. The woman who wishes particular instruction along a certain line in order to increase her earning capacity. For example, she may wish a special course in draping of materials or in sleeve-making if she is a general dressmaker; or to learn the use of a new machine if she is a machine operator. Such courses are often called trade extension courses. They are offered sometimes in the day trade school and workers attend during slack seasons. The day schools of the future will meet more fully the needs of this group, either in classes conducted in high school buildings or in separate vocational schools.

There is also in this group the young woman who wishes to prepare for a certain trade. Such courses are often called trade preparatory. One finds the trade preparatory course offered also in the day classes in the girls' trade school, such as the Manhattan Trade School for Girls in New York City, or the Boston Trade School for Girls, and others. The courses are short, often only one year in length, and intensive training is offered along a particular line of trade specialization, such as power-machine operating,

dressmaking, millinery, novelty pasting, and other special lines with some related academic and art studies.

2. One finds also in evening classes the young woman who comes for a social evening with a more or less serious attitude. She can be interested generally in almost any home economics study but she attends usually for relaxation, and will not care to pursue any subject too intensively.

3. The third group consists of young women usually employed in some line of wage-earning during the day, or housewives who wish to add to their knowledge in home-making subjects. They wish to learn to make their own clothes, to cook, to care for the house, to learn to care for the baby if they are young married women, to study the elements of house decoration, etc.

Because of the limited amount of time possible for attendance during any week or year in evening classes, it would seem wise to offer this work in short units. The pupil after completing one unit and receiving credit for it advances to the next unit, until in time she has completed the various subjects which make up the course. This course will naturally take longer to complete than attendance at the day school where full time would be given; but each unit should be complete in itself and the instruction thorough.[1] The unit is made up of a definite number of lessons. A unit may begin at any time, but pupils should not be permitted to enter except at the beginning of a unit.

The following units of work might be offered in evening classes according to local need and would meet the demands of young women of the three types mentioned above.

*a.* Trade Units.

(1) Sewing (offered in several units if necessary). Plain hand and machine sewing. Undergarments such as lingerie, aprons, underwear, children's garments, middy blouses, etc.

(2) Elementary dressmaking (offered in several units if necessary). Shirt waists, uniforms, simple one-piece dresses, etc.

[1] *Short Unit Courses for Wage-Earners*, Bulletin No. 159, Department of Commerce and Labor, Washington, D. C.

(3) Dressmaking. More elaborate work. Special units in draping, sleeve-making, etc.
(4) Power-machine operating (offered in several units if necessary).
  (*a*) Introductory course. Practice and use of power machine in making aprons, underwear, shirt waists, etc.
  (*b*) Use of varied line of materials, such as chiffon, silks, etc., and construction of more complicated garments.
  (*c*) Use of special machines, such as buttonhole, tucker, hemstitching, two needle, and embroidery machines.
(5) Cookery.
  (*a*) Plain cooking (might be offered in several units). Aim might be to train for domestic service.
  (*b*) Cookery (more advanced).
  (*c*) Cookery and service for special functions.
  (*d*) Cookery in large quantities.
  (*e*) Special courses in preserving, canning, candy and cake-making.
  (*f*) Cafeteria course, includes marketing, etc.
  (*g*) Tea-room course, includes marketing, serving, etc.
  (*h*) Elementary dietetics, emphasizing proper combinations.

The girl electing trade units may also be interested in some of the home-making units. The group on page 185 might be offered for her.

*b*. Home-making units. (A course of study might be outlined to include units also in the related studies in science and art, and upon completion of a certain number of units a certificate in home-making might be awarded.)
(1) Food units.
  (*a*) Preparing and serving breakfast dishes.
  (*b*) Preparing and serving luncheon dishes.
  (*c*) Preparing and serving dinner dishes.
  (*d*) Elementary dietetics.
  (*e*) Marketing, selection, care, and sanitation of foods.
  (*f*) Canning and preserving.
  (*g*) Elementary food chemistry.
  (*h*) Use of substitutes.
  (*i*) Cooking for invalids.

(2) Clothing units.
   (*a*) Elementary sewing, hand and machine processes on underwear, aprons, blouses, children's clothing. (Might be offered in several units, one devoted to underwear, one to clothing for children, etc.)
   (*b*) Care and repair of clothing, darning, patching, simple remodeling, renovating.
   (*c*) Laundering of clothing and household linens.
   (*d*) Selection of clothing, materials or garments ready-made. A study of textiles, prices, widths, uses, etc. Use of substitutes with emphasis on thrift and conservation during war times. Design in clothing.
   (*e*) Elementary dressmaking. Simple skirts, shirt waists, one-piece dresses.
   (*f*) Dressmaking.
   (*g*) Elementary millinery.
   (*h*) More advanced millinery.
   (*i*) Renovating and remaking of clothing, hats, and dresses.
   (*j*) Costume design, elementary course. Study of line, color, historical relationships of present-day clothing to the past.

(3) Units in relation to the child.
   (*a*) General care and health of the baby.
   (*b*) Clothing for baby.
   (*c*) Food for baby.
   (*d*) Child study in early years.
   (*e*) Child study during adolescence.

(4) Housewifery.
   (*a*) Care and cleaning of various rooms of the house.
   (*b*) Care of metals, glass, woods (as floors), woodwork, silver, glassware, etc.
   (*c*) Beds and bed-making. Care of linen, mending, etc.

(5) House decoration and furnishing.
   (*a*) Selecting a home; what to look for.
   (*b*) Course in art principles applied to decoration of various rooms of the home.
   (*c*) Furnishings for bedroom and bath.
   (*d*) Furnishings for dining-room, living-room, halls.
   (*e*) The home kitchen, its furnishing and care.
   (*f*) Choice and use of textiles in the home. Selection of rugs, curtains, table and household linens, draperies, etc.

(6) Management of the home.
  (*a*) Home budgets; division of income.
  (*b*) The personal budget.
  (*c*) Clothing budgets.
  (*d*) System in the home, organization of work, service, coöperation of members of the family in planning work.
  (*e*) Suggestions for simple entertainment in the home.
(7) Health units.
  (*a*) Personal hygiene.
    Clothing, food, rest, air, exercise, amusement, care of body.
  (*b*) Sanitation of the home.
    Home health problems.
  (*c*) Sanitation of the city.
    Municipal health problems.
(8) Units of home-making studies for girls in trade.
  (*a*) Personal budget; wise spending.
  (*b*) Home budget and division of income. Relation of girls' income to home budget.
  (*c*) Elementary cookery.
    Preparation of simple breakfasts, lunches, and dinners.
  (*d*) Wise choice of foods (elementary dietetics), business girls' lunch.
  (*e*) Selection of clothing; study of kind, needs, etc., of business girl.

See also suggestions offered for short courses on pages 129 to 136 for the girl going to college. Adaptation of those to these aims can be easily made.

See suggestions in the Addenda for short unit courses offered in Rochester, Worcester, etc.

B. *Continuation classes.* — The girl of 14 years of age who goes to work is often compelled by law to return to school for one or two years for a certain number of hours each week. The studies chosen by this girl may be along the line of elementary academic work in order to complete the studies for graduation from the elementary school. This type of continuation work leading to graduation is sometimes offered in department stores and factories as well as in school buildings. For example, B. Altman and Company,

New York, conduct such an elementary school in their own building taught by teachers supplied by the New York Board of Education. Altman and Company furnish room space and equipment. Graduation exercises are held each year and pupils receive diplomas for completion of the elementary school course. Such a course for girls usually includes the regular sewing or cooking or Home Economics required by the particular school system for graduation from a particular elementary school course.

For the girl who is a graduate of the elementary school, continuation courses may be offered along certain vocational lines if she has entered a trade or along the line of a possible trade if she knows she wishes to be a saleswoman (salesmanship), an office girl (filing, etc.), a stenographer, bookkeeper (stenography, etc.).

In addition the choice should be made of certain general and home-making studies. This girl, although she must be a wage-earner, will probably be a home-maker at some time, and such units of home economics studies as suggested on pages 129 to 136 or on pages 183 to 185 will meet her needs. It must be kept in mind that training for citizenship is as important as training for a vocation and a girl should be interested in the community life of home, church, and city with its social activities in order to fully live and contribute her part.

The work for continuation school pupils is sometimes offered in the elementary or the junior high school building, if pupils have not completed elementary school and in the high school if pupils are graduates. This depends on local administration.

The home economics courses planned for pupils in continuation classes should vary with the aims of the pupils and the local needs. They may be along two lines:

1. Home-making courses.
   Such as units suggested for evening classes, pages 183 to 185.
2. Special trade course.
   Which may be the outgrowth of certain interests aroused in the elementary school in Home Economics. Such units have been suggested on pages 182 to 183. These may be of a trade-preparatory nature or of trade-extension type.

No mention has been made in this book of the various types of evening and continuation classes for girls in industry along other lines, as this book treats only of the home economics studies, and the trade subjects which are the outgrowth of certain home activities are the only trades here suggested for girls in industry. It must not be forgotten that there are many other lines of industry open to women and that these vary with the local needs and conditions.

C. *All-day vocational schools.* — The high schools of the future will offer short courses of one or two years in commercial, agricultural, industrial, and home-making studies, to meet the needs of girls who cannot remain in school because of economic or other reasons. This is being done to-day in some high schools, and in some states and large cities special vocational schools are organized to meet this need. The courses vary from one to three years and some offer shorter courses of study which may be taken in units along a line of particular interest.

The all-day vocational school aims to prepare in a relatively short time for a particular job. From the point of view of the home economics studies we are interested in these schools in three different ways.

1. Because training for the vocation of home-making may be offered in the all-day vocational school.

2. Because girls entering any line of industry or commercial or agricultural work need some of the home economics studies as a part of their general education for better living.

3. Because some of the industrial vocations for women are outgrowths of the home economics studies.

The following suggestions are made for introducing the home economics studies into the all-day vocational school because of these reasons.

1. To train for the vocation of home-making. — This is a particular job which is an undifferentiated task. It means many lines of study. Adaptation of the suggestions made for training for vocational home-making in high school may be made to the shorter course in the all-day vocational school (see pages 152 to 156),

or certain of the home-making units may be grouped for this major. (See home-making units suggested for evening classes.)

In this type of school, time should be given also to related studies in science and art and in academic studies according to the length of time planned for the completion of this major.

2. Girls entering any line of industrial, commercial, or agricultural work need some of the home economics studies as a part of their general education.

For this group it is suggested that adaptation of the units suggested on pages 129 to 136 be made to meet the needs of such girls. The emphasis may well be placed in planning such courses on the thought of selection of proper clothing and food for the business girl and on the wise spending of her income.

At the Manhattan Trade School for Girls the instruction in home economics studies is offered indirectly through other courses, while the girls major in the industrial vocations of machine operating, dressmaking, or novelty work. This is because the time is limited and the girls must go to work as soon as possible. The main goal to be attained in a short period of time is a certain proficiency in a particular vocation. Through the studies of English, arithmetic physical education, and art, the girls have instruction in personal hygiene, the personal and family budget, color in dress, and house decoration. Courses in textiles are also given because many of these girls will handle textiles in industry. Instruction in food is limited to the handling of it in the preparation for the noon-day lunch.

3. The third reason for the interest of the home economics teacher in the all-day vocational school is that certain industrial vocations have grown out of home activities.

*a*. Those related to clothing.

*b*. Those related to food.

Some all-day vocational schools offer majors in dressmaking, power-machine operating, millinery, cookery on a commercial basis, etc. The teacher of these industrial occupations which are the outgrowth of the home activities should be one who has had trade and shop experience. The home economics teacher sometimes

supplements her training with this experience but unless the exigencies of the occasion make it necessary for her to teach the trade classes she is not as a rule prepared to give trade instruction. Such schools as the Manhattan Trade School for Girls, New York City, the Milwaukee Trade School, the Boston Trade School, the Minneapolis Vocational High School for Girls offer majors in the home activities which have been taken over by industry. The reader is referred to the Addenda for the work offered by these schools and should consult the catalogues of these schools. Reference is also made to the full outline of aims of such schools in Vocational Education of Girls and Women by Albert H. Leake.[1] On pages 182 to 183 suggestions are made for trade-preparatory and trade-extension units for evening classes. These can be adapted for use in the all-day vocational schools, in majors in clothing or food and should be supplemented by academic and related subjects as time and need demand.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Give your opinions in relation to the aims of home economics courses in the high schools of to-day and to-morrow.
2. Give a general classification of the numerous courses offered in our high schools.
3. Look up college entrance requirements. Are home economics units accepted for entrance?
4. What should guide one in outlining courses of study in home economics for the girl going to college?
5. Make a course of study for the girl preparing for college which will meet some conditions known to you. Time, 1 unit for college entrance.
6. Give suggestions for vocational advice and guidance of girls in high school. How would you organize such instruction?
7. Plan in detail the home economics phases of a course of study which might be offered in high school to girls expecting to teach in rural schools.
8. Send for catalogues of high schools giving normal training courses.
9. What is meant by the general course in high school? What arguments can you give for its continuance?

[1] *Vocational Education of Girls and Women.* By Albert H. Leake. Macmillan Co., N. Y. 1918.

10. Send for catalogues of high schools offering college preparatory and other courses of a general type.

11. What aims should be kept in mind in selecting home economics studies to make up the curriculum for the girl electing any type of general high school course?

12. Write some suggestions for each of the four years of the general home economics course. Time, 6 to 10 periods per week for 40 weeks.

13. What is meant by technical or vocational courses in high school? Name the objectives of some of the vocational courses which are offered in high schools.

14. What home economics studies do you think the girl choosing the vocational commercial course in high school should pursue? Plan a course which you think will meet her needs.

15. What is the aim of the vocational course in home-making? How would you distinguish it from the general course in high school in household arts?

16. Plan a course in vocational home-making to be given in two years of intensive work in the 3d and 4th years of high school. Time, 15 hours per week, without related studies.

17. What do you think should be the reasons for using a practice house in any type of home economics course?

18. Send for high school catalogues which offer vocational agricultural work for girls. What part should Home Economics have in such a major?

19. What is meant by vocational industrial courses for girls in high school? Do you know of any being offered?

20. Discuss the four points which should be kept in mind in planning any type of vocational industrial course in high school.

21. Read parts of one of the Educational Surveys of Minneapolis, Indiana, Cleveland. What is the value of such a survey?

22. Plan any type of vocational industrial course in high school which may be considered an outgrowth of the home economics field of study.

23. Write a paper giving general ideas in relation to the organization of the junior high school.

24. What aims should govern one in planning home economics studies for girls during the junior high school years?

25. Plan a course for junior high school for the group of girls who will leave school at the end of that period; for those who will proceed to college.

26. Plan a class scrapbook of all clippings you can find in relation to junior high school work for girls. This is comparatively new work. /

27. Discuss the organization of work in home economics for the senior high school.

28. Write a paper of 500 words, to be read at a state teachers' meeting, on Home Economics in the small high school.

29. What plans would you make for girls between 14 and 16 years of age who return to school for 18 hours per week? How much of this time do you think should be devoted to home economics studies and what would you present?

30. Write a plan for 10 units of Home Economics to be offered in evening classes in a vocational home-making course.

## REFERENCES FOR COLLATERAL READING

Courses of study collected from various high schools of the United States.

A Modern School. Hanus.

Democracy and Education. Dewey.

The American High School. Brown.

The American Secondary School. Sachs.

Changes Needed in American Secondary Education. Eliot.

Country Life and Country Schools. Carney.

Problems of Secondary Education. Snedden.

Course of Study for Grades 7–10, Framingham Normal, Massachusetts Board of Education, Boston.

The Amy Schüssler Apartment, Teachers College Record, January and March, 1915.

Tentative Course of Study in Household Arts for Speyer School, Grades 7 and 8. Bulletin 19, Teachers College, New York City.

Educational Surveys of Minneapolis, Richmond, Indianapolis } Published by National Society for Vocational Education, 140 W. 42d St., New York City.

Survey of Cleveland Foundation. Division of Education, Russell Sage Foundation, New York City.

Report of Committee on Junior High School, presented to the High School Masters Club of Massachusetts, 1917. D. C. Heath & Co.

Report of United States Commissioner of Education for 1914. Articles by Dr. T. H. Briggs on Junior High School.

Home Economics Education. Organization and Administration. Bulletin 28, Home Economics Series 2. Federal Board for Vocational Education, Washington, D. C.

Vocational Education of Girls and Women. Leake.
The Making of a Girls' Trade School. Woolman.
Cooking in the Vocational School. O'Leary.
Our Schools in War Time and After. Dean.
Vocational Education. Snedden.
Vocational Secondary Education. Bulletin 21, 1916. United States Department of Education.
The Vocational Guidance Movement. Brewer.
Vocations for Girls. Laselle and Wiley.
Vocations for Girls. Weaver.

## CHAPTER VIII

## HOME ECONOMICS IN RURAL SCHOOLS

I. The rural situation.
   A. Introduction.
   B. The responsibility of education in solving.
II. A field of interest to teachers of Home Economics.
   A. The importance of the farm home.
   B. The need for better homes.
   C. Farm women ask for help along all lines of Home Economics.
III. Home economics extension service.
   A. A factor in rural home betterment.
   B. The influence of the Smith-Lever Act.
   C. The County Farm Bureau.
   D. The home demonstration agent.
   E. Girls' clubs.
IV. Home Economics in the rural schools.
   A. Girls' clubs a feature of school work.
   B. Growing demand for regular instruction.
   C. School credit for home work.
   D. The hot lunch.
V. Home Economics in the one-teacher school.
   A. Conditions to be met.
   B. Suggestions for planning a course in Home Economics.
VI. Home Economics in the consolidated school.
   A. Conditions favorable to good work.
   B. Adaptation of subject matter.
VII. Home Economics in the rural high school.
   A. General introduction.
   B. Organization of courses.
   C. Vocational education for country girls.

**The rural situation.** — *Introduction.* — No social group has attracted to itself more consideration in recent years than have the farmer and his family. The dependence of the world upon the products of the soil has created an intense interest in those who produce the food supply, and has led to all kinds of analyses and investigations of the factors that make for wholesome life in the country. The business man, the banker, the politician, the economist, the preacher, and the teacher have all suddenly awakened to the fact that here is a class of citizens who are giving of themselves and of their labor, and who in return are not finding in life sufficient satisfaction to enable them to persuade their sons and daughters to continue on the home place. Investigations show that the lot of the farmer and his family is not particularly enviable and that the ambitious youth can hardly be blamed who abandons the farm for the city in search of the advantages all young people crave. The farmer has been so engaged in making a living that the larger and more attractive elements of life have received little attention. The enjoyment side of life has been lacking. Because of their isolation it has been difficult for the farmer and his family to feel they are an integral part of the social scheme and consequently there has been that tendency toward individualism which has not made for the greatest progress. The worth of the work on the farm and in the farm home has not been rightly measured by those engaged in it. They have never seen it in its right relations to the world's industries and consequently have not dignified it and have not seen in it much promise for the future. Little wonder then that boys and girls leave the farm, or that life for those who remain becomes rather uninteresting and monotonous.

This is not as it should be. Country life has in it greater possibilities for self-expression and more of those elements which provide for complete living than can be found elsewhere, but many changes in rural conditions need to be brought about before these advantages can be realized by country populations. Living in the country must be made more attractive and new ideals must be established.

The rural problem can never be settled until we can keep on the

farms a class of people with high ideals in regard to the value of their work, who as a class feel their social worth.

*Responsibility of education.* — It goes without saying that the institutions of a community are largely responsible for the ideals and attitudes of mind found in the members of that community. Rural institutions must bear this responsibility for rural populations. If the coming generations are to have the desired attitude of mind toward living in the country the rural institutions must develop it. The school is the most permanent and most democratic of these, and because of its recognized place, should be the greatest factor in developing a real rural-mindedness in its boys and girls. It should be instrumental in directing the minds of boys and girls to see the full worth and dignity of farm and farm-home labor and to make them conscious of their responsibility to develop a real rural citizenry.

As a matter of fact, however, rural education has been very much retarded; it has changed very little during the past quarter century. Other changes have taken place in the country; farms have increased in size, farming practice has improved, farm buildings have become larger and better, the telephone, rural mail delivery, and the automobile have exercised their socializing influence, but the rural schools on the whole have not kept up with the general progress. This is to be regretted, for in the final analysis it is to the school that we must look for permanent help in solving the rural problem.

Instead of being a live institution eflecting the life of the community and developing leadership among its boys and girls the rural school has been too long in a state of arrested development. The gravity of this situation is felt when we appreciate that this institution is responsible for influencing approximately twelve million country children and that its influence is felt by practically one third of our entire population. Whatever is done to improve this part of our educational system reacts upon the nation as a whole and is worthy of the most serious thought and effort on the part of all educators.

**A field of interest to teachers of Home Economics.** — *The importance of the farm home.* — Because we believe that the farmer's

wife is as great a factor in solving the rural problem as is the farmer himself, and because the attractiveness of the farm home and its surroundings will do more than any other one thing to keep boys and girls contented on the farm, those interested in education for the home have a peculiar responsibility in sharing their ideas with the farmer's wife and daughter. Scientific farming with all that the term implies, and scientific home-making must proceed together. Girls as well as boys should be led to appreciate the value and dignity of their work and should be taught to manage the affairs of the household in such a manner as will give them time and opportunity for social, educational, and cultural improvement. They should be encouraged to participate in community affairs and be made to feel the value of their influence in solving all kinds of civic problems, especially those that have to do with rural life. They will never get into this larger living until they first acquire a scientific knowledge of home-making with all that this term implies, — until they evaluate all the processes of housekeeping and routine housework and can see the relation of their work to the building of character in the members of their families and can appreciate the significance of the farm home as a community asset.

*The need for better homes.* — It is the farm *home* and not only the farm *house* and housekeeping processes in which we would interest our country girls, but the two depend upon each other so closely that an understanding and application of science and art in the mechanical routine of daily living are essential to the development of the broader outlook which we would give.

In too many country homes the housework is often very unattractive and exhausting. The comfort of well-planned houses has not been given consideration. Economy of time and energy have not been factors in the building, while the poor arrangement of the kitchen is perhaps one of the most discouraging features of the average farm home. Inadequate and poorly arranged equipment makes the daily preparation of meals or the doing of the week's wash a greater burden than should attend such duties. The absence of sink and running water which necessitates lifting and carrying heavy bucketsful of water in the farm kitchen is not in

keeping with the use of improved machinery outside the house on the progressive farm.

The sweeping and cleaning of carpets and other furnishings by old-fashioned methods entail more strength and labor than should be expended in this way. The gasoline engine and electric motor are finding their way to the farm and should be harnessed to the kitchen. It is quite possible to have running water in the house; to do the washing and ironing by electricity; to let the vacuum cleaner do its share of the work and to relieve the housewife of much of the heavy work she has been doing.

It is quite possible, too, to make the home surroundings much more beautiful and attractive, to say nothing of the possibilities of improved sanitation to make the place more healthful. A clean, well-kept dooryard, beautified with trees, lawn, and flowers, adds not only to the value of the farm, but enriches the lives of the members of the family and instills a love for life in the country.

A sanitary dooryard bespeaks the sanitary conditions within the home. Exposed kitchen waste, unsanitary toilets, and other disease-breeding refuse are an invitation to flies and mosquitoes and possibly other household pests which need have no place in any home where healthful living is given thought. Even poverty is no excuse for unsanitary farm conditions. Ignorance alone is the reason for it. Only when the dangers of unsanitary conditions are understood can we look for improvement in this direction.

The need for beauty and sanitation is not limited to the dooryard. The interiors of many farm homes could be made much more pleasant and attractive if some of the principles of art were understood and applied. Carpets and heavy draperies would give way to bare floors or rugs; some good pictures might contribute their bit of charm; many useless knickknacks would be dispensed with to reduce the task of cleaning; sunshine and fresh air would flood every room of the house regardless of carpet and wall paper.

Nowhere can the principles of simplicity and harmony be better exemplified than in the farm home where space and all the beauties of nature make so rich a contribution. There is a rare opportunity for individuality in choice of site, style of architecture, and selection

of furnishings, impossible for those who dwell in cities. Our farm women are appreciating the fact that they are missing much that contributes to the enjoyment of living and are asking for help along the lines suggested above. In the Government Report, No. 104, Domestic Needs of Farm Women, there are extracts of letters written by farm women which should offer suggestions to all those interested in rural home problems.[1]

In response to a letter addressed to the housewives of 55,000 crop correspondents, asking in what way the Department of Agriculture could be of greatest service to the farm women of the United States the domestic needs suggested in the following paragraphs were included.

*Farm women ask for help.* — 1. Household management. — Only one who has lived on a farm and who has participated in some way in the routine of the day's work can have a real appreciation of the endless round of duties of the wife and mother on the farm. The value of her work can never be estimated. In no other industry is the necessity for coöperation on the part of all members of the family so urgent. The wife is the farmer's business partner and shares with him not only the business responsibility but many of the farm chores as well. Even on the better farms the care of the poultry, bees, garden, and often the feeding of young calves and pigs are a part of the women's work. Added to this the care of the milk and butter, the preparation of all meals, the laundry work, including the heavy and much-soiled garments required for farm work, the cleaning of house and dooryard, the sewing and mending, the care of children and nursing in case of illness make it very evident that the women on the farms are doing their full share of the world's work. Little wonder that they are asking for help to make the solution of their problem easier.

Scientific management of the farm home and of woman's work on the farm must be established before the community at large can ask for much of their help in solving civic problems. House-

[1] See U. S. Bulletins. No. 103. Social and Labor Needs of Farm Women. No. 104. Domestic Needs of Farm Women. No. 105. Educational Needs of Farm Women. No. 106. Economic Needs of Farm Women.

hold labor must be decreased by remodeling old houses and exercising greater thought in the construction of new homes; labor-saving devices must be introduced not only but instruction must be given in regard to their use. Better system in the general routine of work could be effected, the expenditure of labor being thereby greatly eliminated, and time being released for other activities which would give greater joy to living.

2. Prevention of disease and care of the sick. — According to a recent report on rural health conditions prepared by Dr. Thomas D. Wood, Chairman of the Committee on Health Problems of the National Council of Education[1] it would seem very urgent that steps be taken to give the help asked for by the farm women themselves and to do all that is possible to supplement the natural health-promoting advantages of the country with such information as is needed. Fresh air, sunshine, and physical activity cannot combat all the evils which may result from the utter disregard of the principles of hygienic living. An understanding of the need for a pure water supply, for improved methods of sewage disposal, for safeguards that will prevent the spread of infectious and contagious diseases will result in an exercise of greater intelligence in caring for the health of rural populations and must eventually reduce the mortality.

The city mother has easy access to medical service and advice; the clinic, dispensary, and visiting nurse are close at hand and legal protection in health matters is offered; there is greater assurance of pure milk and pure water in the city than in the country and greater conscious effort to protect children and adults from those things which undermine health. Comparisons between city and country are unnecessary; it is only reasonable that rural health problems be given the attention they require and that the importance of the rural health situation be appreciated by those whose influence and ability are needed in this direction. Coöperation on the part of the home, the school, and all existing organizations is essential to bring about adequate rural health supervision. No one stands in a better position to understand and appreciate the

[1] *Health Essentials for Rural School Children.*

health conditions in a community than does the intelligent home economics worker and she should do her large part to establish such organizations as will result in adequate supervision of rural health, and do all in her power to assist mothers in maintaining and promoting the health of their families in response to the earnest appeals that have been and are being made. Already the rural nurse and medical inspection in the rural school are gaining favor, and with the organization of counties for the improvement of all rural conditions we may expect great progress along this line.

3. Care of babies and little children. — The need for knowledge in the care of babies has always been urgent, but possibly never more so than now when human life has taken on new values. The rising value of the baby is being demonstrated in many ways. The Children's Bureau in the United States Department of Labor may be given credit for initiating a widespread interest in better babies and baby-week campaigns; the health departments of various states and of many cities do very effective work. Many private benevolent agencies whose sole interest is to reduce infant mortality are coöperating with health boards and are making it possible to secure necessary medical attention and pure milk for thousands of babies. This type of organization, however, limits its work too largely to urban populations. The country mother's needs have never been adequately and systematically met. The needs are just as great and her requests for help in the rearing of her children should be met.

4. Food problems. — The farmer's wife has to meet a variety of problems in connection with feeding her family. She has this advantage over her sister in the city, it is possible in most cases to produce all the essentials for home consumption. The value of fresh milk, butter, eggs, fruits, vegetables, and meat far exceeds their cost of production especially when there are growing children.

Farmers as well as their wives need to appreciate the importance of a varied, well-cooked, well-selected diet for their families to the end that they will give at least as much attention to the food eaten at the table as is given to the balancing of rations for their stock, and they should plan for the plowing and seeding of the garden

plot as a matter of farm routine. Much has been learned in regard to human nutrition that has not yet found its application in many rural sections.

The need for better food preparation is also strong. Many country women are excellent cooks, yet not all have learned the art, while to most the scientific principles are unknown.

Many women in rural districts are restricted to monotonous diets during certain seasons because of a lack of knowledge of storing and preserving foods. The winter meals are too frequently limited to potatoes, bread, and meat with the resulting need for sulphur and molasses in the spring. The great need for food production and conservation accompanied by canning, preserving, drying, and otherwise storing all kinds of fruits and vegetables is productive not only of thrift but will result in everlasting good in getting on our tables a greater variety of foods necessary to the promotion and maintenance of good health than ever before known. The extensive use of cured meats necessary in the country calls for greater intelligence in their preservation and also for more variety in their preparation for the table. A pleasing variety of meats is easily obtainable with so much information in regard to curing and canning at hand. The care of food in the home where refrigeration and ice are unknown quantities is another problem that needs attention and is being satisfactorily solved through the use of the iceless refrigerator in some of our southern states. Many have expressed the opinion that the question of food has been given undue emphasis by our home economics teachers, but the food needs are so apparent that it is impossible to overemphasize food values and food preparation until greater results become evident.

5. Clothing problems. — Yet another problem that confronts the farm woman is that of clothing her family. Her interest in providing pretty, serviceable, and appropriate clothing for herself and her daughters is evidenced but her opportunity for learning how to choose materials and to construct garments so that the results are satisfactory has not been great and consequently the term "countrified" has a significance which might become obsolete could more instruction be given along this line.

Farm women are engaged in a unique industry and might easily adopt a costume better suited to their work than is now worn. The farmerettes have already contributed something worth while to the solution of a workaday uniform. Bloomers, or at least short skirts, are conducive to the freedom of movement required by any woman working first in the garden, then with the poultry, calves, or other live stock. The morning dew and the unavoidable soil make for bedraggled skirts and the unattractive appearance of many women. The changing of garments when desirable for house wear would not take the time and energy that the laundering of dresses and skirts requires, while the difference in feeling and appearance would give added pleasure to the day's work. "Appropriateness, suitability, and simplicity" are ever applicable terms and when understood aright will result in better choice of materials and styles.

The questions of time and energy expenditure are so great in connection with the clothes problem that only well-made, easily laundered garments have a right to a place in the wardrobe of the busy woman who does her own work. An understanding of textiles and a knowledge of sewing will make this possible, while intelligence in laundering and caring for all articles of clothing will extend the life of all garments and release time for the busy housewife.

**Home economics extension service.** — *A factor in rural home betterment.* — The above is but a brief discussion of some of the problems that confront the farmer's wife. Their significance is of national importance and already much direct service has been rendered through the United States Department of Agriculture. Its various bureaus, through bulletins and other publications, have contributed much valuable information designed to be of practical help to the housewife and much has been done through the various types of extension schools and farmers' institutes organized by and attached to the agricultural colleges. Short practical courses of instruction have been given at the agricultural colleges while many localities have availed themselves of the instruction given through the movable schools. Demonstrations, illustrated lectures, conferences, exhibits, demonstration trains, fairs, etc., have for many

years been interesting and valuable factors in promoting farm home betterment.

*The influence of the Smith-Lever Act.* — Nothing has ever been of greater importance in the history of Home Economics than the passage of the Coöperative Agricultural Extension Act, or Smith-Lever Act in July, 1914. Through the funds which it made possible and through the new organization which it effected, extension work in agriculture and Home Economics has had a phenomenal growth. It has resulted in the organization of farm women for the purpose of defining and studying their needs under the sympathetic assistance of trained leadership.

*The County Farm Bureau.* — State-wide extension service has been carried on for many years and the extension department of the agricultural colleges is responsible for the work, but the organization known as the County Farm Bureau is of more recent origin. The bureau is an organization made up largely of farmers, farmers' wives, and others, who are interested in investigating and promoting all that pertains to better and more prosperous living in the country.

*The home demonstration agent.* — A complete county organization, however, is not effected until the bureau has employed a home demonstration agent. The farm home and the farm business are so dependent upon each other that they cannot be separated, each includes the other, yet it is obvious that a trained woman will have a more sympathetic appreciation of the home problems than will most county farm agents and this has led to the employment of women, to assist in the direction of various projects undertaken by farm women. The work parallels that of the county farm agent. It is still an undefined field, full of possibilities. The work of the woman on the farm is not limited to the home but because of the greater need for the solution of home problems and the easy entrance to the woman's interests through her home, women trained in Home Economics have been chosen to take up the work. The great need for help in the food conservation problems and the financial help given through the War Emergency Act have greatly increased the numbers of home demonstration agents, but it is to be hoped that their work will prove so valuable that no county will

ever feel able to dispense with the services of the home demonstration agent.

*Girls' clubs.* — The girls' club had its origin in the canning club work of the South in 1910, following the great success achieved by the boys' clubs. This type of organization is now nation wide and is no longer limited to tomato growing and canning, but extends to any field of the girls' interests and activities. From the desire for greater economic production through the marketing of garden produce and poultry, and the provision of fresh fruits and vegetables for the home table, the club idea has entered the home and has been responsible for promoting an interest in all kinds of activities within the home. There is something peculiarly attractive to girls in club membership. Coöperation and competition with satisfactory rewards have resulted in success and achievements of real significance. The purposes of club work are being fulfilled and its economic, educational, and social values recognized. Greater productivity through the agricultural clubs has been of value to the state and has given the girl a sense of her earning capacity at home; greater variety in the diet of the family has been made possible through the supply of fresh and canned fruits and vegetables; the home arts have stimulated greater interest in home-making on the farm, and through her daughter's help the mother has been relieved of some of the work, and a closer bond has been established between the two because of their common interests. Where the teacher in the community has been a factor in promoting club work a stronger contact has been made between the home and school by providing common ground for teacher and parent. Above this, the club activity has developed the girl through the opportunity given to exercise her initiative and leadership. The responsibility to the group in regard to her project has prompted the spirit of coöperation so much needed everywhere, and her interest in community life has been strengthened. Club meetings have given her contact with others and have made for a form of social life that has too long been lacking for girls who live in the country.

Other educational values through reading bulletins, outlining and describing projects; writing for information; recording results;

estimating time and cost; marketing her products and doing other business in connection with her project have all made the work worth while and have made club leaders everywhere feel that the club is here to stay.

**Home Economics in the schools.** — *Girls' clubs a feature of school work.* — The value of these agricultural, industrial, and home economics clubs cannot be overestimated, but if they are to become a permanent feature in all communities and all girls are to receive their benefits, they should be allied with the school system. It is a serious mistake to build up a line of work outside the school system and parallel to it. Schools are recognized permanent institutions, and home economics work done through the schools need lose none of the values suggested above but rather the values will be increased through the rich contribution made to the school life of the girl and the attending greater interest in other school subjects which will ensue. It is more probable that the work will have greater educational value; methods of work can be more carefully directed, underlying principles can be taught at the time when application can be made, results can be studied and compared and school credit be given. The teacher, with the help of the club leader or demonstration agent, should be able to initiate projects, the working out of which will motivate the school work, and which will be a strong factor in redirecting and revitalizing rural education.

There is great need for introducing new subject matter into our rural school curriculums and for revitalizing the old subjects, in order to keep boys and girls in school and possibly to inspire them to continue their education for a longer period of time. The introduction of farm and home problems of interest to the pupils is one direct means of doing this.

The increased interest on the part of patrons when work of a practical nature has been undertaken has been demonstrated. There results a greater willingness to improve school conditions, to employ better teachers, and to make the school what in former days it used to be, the center of interest in the community.

In order to achieve best results it is quite essential that there be strong coöperation between club leaders and school teachers. They

must be mutually helpful for each must depend upon the other for success in carrying out projects. The woman trained in home economics has her fund of subject matter, but frequently has had no experience in dealing with rural school problems, while the rural teacher must depend for subject matter and special methods upon the club leader.

*Growing demand for regular instruction in the home-making subjects.* — However popular club activities may be, club membership is optional and there is a growing demand for a definite place in the school program for instruction in the home-making subjects. They have long since found their way into the urban schools and proved their worth and it is to be expected that in the reorganized rural school curriculums, education for the home must have a place. If the subject has a value is it not important that all girls be given an opportunity to study it? Have not science and art much to contribute toward making home life on the farm more beautiful and satisfying? Have we not made much progress in connection with food problems that would be of especial interest to this girl who, more than any other, produces and prepares foods daily? Or in connection with clothing which might help her in solving problems connected with her own and the family wardrobe? Is there not much in connection with art and sanitation in the home and dooryard that would have fascination for her and which would lead her to make her immediate environment more beautiful and healthful? Does the farmer's daughter appreciate her place in her family, and as a member of her community to the extent that she coöperates with her neighbors in building up the community spirit so essential in solving all rural problems? No one who understands the country girl's problems and who appreciates what Home Economics has to offer will doubt for a moment their worth to her and their *increased significance* when made a *regular* part of the school program. Taught by a skillful teacher who, as a usual thing, has the respect and confidence of young girls, no one subject will have greater influence in developing the girl than will Home Economics.

It is only right and natural that the attention of home economics teachers be directed to the country and the rural schools so that

conditions there may be better understood. Rural school educators are asking for help, but only intelligent help based upon a first-hand knowledge of the situation will be of value. Farm home problems are different from those confronting the city home, and rural school conditions differ from urban conditions, consequently there must be a knowledge of these and a reorganization of home economics subject matter adapted to the rural home and school situation if the greater benefit is to result.

*School credit for home work.*[1] — In some localities where it is impossible to carry on any practical home-making work in the school, school credit for certain types of work done at home may be given. The recognition given to the work by the school tends to stimulate the girls' interest in performing home duties and where the work is supervised or checked up by some competent person should result in the formation of right attitudes of mind and good habits of work.

Credit given for home work based upon the "home project" idea carries with it real significance as it is presupposed that definite instruction will be carried out if the project is undertaken, and that in general, the work will be supervised and results checked. Through the coöperation of the extension service and the rural school this scheme is feasible and seems to offer one of the best ways of stimulating an interest in the home activities and making the work a real part of the school program.

Even though the school offers good instruction and gives ample school time for practical work every girl should be encouraged to practice at home what she has learned at school and to report the results of her efforts. Nothing will please the girl's mother more and stimulate her interest in the work of the school than to have her daughter show increased interest in the home duties because of what she has learned at school. This is one sure means of bringing about the spirit of coöperation between home and school so much desired.

*The hot lunch.* — The question of the proper feeding of school children is fast making its way into the rural communities. One

[1] Read Alderman's *School Credit for Home Work.*

has but to become familiar with the history of the school lunch and its effects upon the physical and mental condition of the pupils to appreciate its worth. The preparation and serving of at least one hot dish each day to supplement the lunch brought from home should become a part of the daily routine in all country schools where children carry their lunches.

It will take some time to convince parents of the value of this, especially where they feel their own children are well fed. They do not always understand that malnutrition is not always caused by lack of food but very often by overfeeding or by incorrect food habits. When once they are brought to realize the benefits of the hot noon meal there will be no difficulty in making provision for it.

Perhaps no better testimony of the value of the hot lunch can be given than the following written by one who was instrumental in establishing the hot lunch in the rural schools of one of the Canadian provinces.

One could list a great many benefits to be derived from the hot lunch. Of first importance is the fact that it gives an opportunity to study and plan proper food for children and where this has been done teachers report better health standards which result in higher efficiency on the part of the children. From personal experience I found I had very few dull or listless children in the afternoon as compared with the time when we ate cold lunches. In addition to the improved standards in health and efficiency it has a splendid socializing value. It affords an excellent opportunity to develop a coöperative spirit among the school children as well as a coöperative spirit between the school and the home.

The hot lunch system affords an opportunity to coöperate with the homes in teaching proper table manners and other desirable courtesies. It helps to raise the dignity of household labor and the result has been that boys and girls become more valuable helpers in the home.

Another excellent result has been that wherever hot lunch work has been introduced it has created a desire to know more about food values, food production, etc.

Many questions in regard to establishing this work will at once present themselves to the teacher. No one who has not had some training or experience to justify her should undertake the responsibility of feeding school children without getting all the expert advice possible. Country teachers may get the help of the home

demonstration agent of the county, or possibly some other person trained in Home Economics may be available for help.

The problem of equipment is always one that calls for consideration. Chapter XIII should be read in this connection. Each school will have its own conditions to meet and must be governed by them. The number of pupils enrolled, floor and wall space, the aims of the work and other local factors must be considered. However, there are some things which will be necessary in every situation. Wherever food is prepared and served, there must be a table on which to work, storage space, a stove, cooking and serving utensils, and cleaning equipment.

The *working space*, or table, and *storage space* may be combined. Where funds are available, a regular kitchen cabinet with table, shelves, and drawers is a most desirable piece of furniture, but a good substitute may be provided by utilizing a strong, well-made drygoods box of suitable size and shape. Shelves may be built in and a door hinged on. Drop leaves may be attached to the sides to increase table space when necessary. Castors should be provided to facilitate moving. The exterior of this improvised cabinet could be painted some desirable color. The top may be covered with zinc or oilcloth. The interior will be more attractive and sanitary if painted white; no oilcloth or paper need be placed on the shelves.

The making of a piece of furniture of this type offers a good project for older pupils and need cost very little.

Sufficient table space may be provided by a drop shelf attached to the wall, while several smaller shelves may be placed above for storing food and utensils. It is always more desirable, however, to store all supplies in closed cupboards of some kind because of the dust in the average schoolroom.

All staple groceries, such as are commonly kept on hand, should be kept in close-covered containers. Jars or cans provided with covers may be used. In one school the pupils painted ordinary coffee cans white and made attractive labels to indicate the contents. Larger containers such as five- or ten-pound lard buckets or sirup cans may be used for flour, meal, sugar, etc. It is abso-

lutely essential to keep all food supplies from mice and all other vermin which find their way in from the open fields.

A suitable *stove* for cooking purposes must be provided. Where the low flat heater is used for heating the schoolroom, it answers very well for cooking. In the more modern schoolrooms where the jacketed stove is installed it will be necessary to provide some other kind of stove. A good two- or three-burner blue flame oil stove is recommended. It is safe, and if kept clean, gives good results. The more explosive fuel, such as gasoline and alcohol, should not be used for general school purposes. An oven makes it possible to provide a greater variety of dishes and where funds permit one should be purchased. In order to save fuel, and attention to cooking processes on the part of teacher and pupils, a fireless cooker is a valuable piece of equipment. The making of the cooker offers another interesting project and can be accomplished with the expenditure of little time and money.

The number and kind of *cooking utensils* will depend so entirely upon local conditions and plan of work that a detailed list seems inadvisable. The needs of the school should be studied and adequate provision be made to meet them. Serving dishes may form a part of the equipment or each child may bring from home as needed. It is more attractive to have the dishes uniform and this is insured only when they form a part of the regular equipment. Paper napkins should be purchased in large quantities and should be supplied to each child. Towels, dishcloths, cleaning cloths, holders, and aprons are all necessary and should form the basis for interesting lessons in the study of textiles and sewing.

The school board should be willing to provide adequate equipment for the hot lunch as well as for all other necessary school work. Where this is not possible a resourceful teacher and pupils will find a way to finance it.

The furnishing of food supplies will vary in different localities. Ordinarily there is no lack of all kinds of food materials in the country, but some plan must be devised whereby the responsibility of providing them is distributed among the various families.

It is advisable to call the patrons together and let them formulate

their own plans and to allow the pupils to assume a good share of the responsibility in seeing that the plans are carried out.

The organization and administration of the work calls for careful consideration. It is desirable that all pupils share in the practical work, and that the daily routine be carried on by committees or groups who will plan their work so as to disturb the school as little as possible.

One teacher who has been successful in conducting the school lunch divided her pupils into four groups, namely the cooks, the servers and dish washers, the housekeepers, and volunteer workers. By rotating the groups all pupils had opportunity to engage in all phases of work. Very wholesome competition between boys and girls and between different groups resulted.

One hour each week, preferably sometime Friday, may be set aside for making plans for the following week and for giving instruction in food values, preparation of new dishes, checking up supplies, etc. After routine has been established it will not be difficult to carry out a more definitely organized sequence of lessons bringing in various other home-making activities.

The preparation and serving of the hot lunch is one of the best ways of introducing home-making into the rural schools and of stimulating an interest in the subject, but no one should make the mistake of thinking that the routine preparation of hot cocoa, soup, baked potatoes, etc., and the necessary dish washing and cleaning up, constitutes a course in home-making. Where introduced the lunch may be used to motivate much of the home-making work and can be made to serve real educational ends.

**Home economics in the one-teacher school.** — *Conditions to be met.* — It is in the one-teacher school that the greatest obstacles to the introduction of any new subjects will be met. Conditions at first seem so unfavorable to Home Economics. The day's program is already overcrowded; the building and equipment are seemingly inadequate to present needs; many of the 350,000 teachers are untrained; adequate supervision is not possible; and above all community sentiment is not always favorable to the addition of any so-called fads or frills. Yet 12,000,000 country

children are worth strong effort on the part of those who believe that education for the home will promote our national welfare and who know that the home and school must progress together. Conviction of its worth and a willingness to help where help is most needed will finally put Home Economics within reach of every country girl. Through the machinery already set in motion by the Department of Agriculture and the intense interest in rural education on the part of all educators every obstacle will vanish in time.

1. The plea of the crowded curriculum must be heard and must be answered. No doubt many of the nonessentials so long carried may be eliminated from the curriculum and better organization of subject matter through correlation will make room for home economics. The bringing together of subjects or parts of subjects that are naturally related not only saves time but increases teaching efficiency. The following illustration shows how the regular school subjects were made more worth while through their application to home affairs.[1]

Arithmetic naturally finds its most practical and helpful exercise in connection with agriculture, manual training, or some other concrete subject. In a class in Home Economics in a consolidated school, the matter of artistic designs in wall paper was under discussion. It was discovered that nearly every girl in the class came from a home where papering was soon to be done. Here then was the opportunity to correlate the work in Home Economics, art, and arithmetic. Designs for the paper of different rooms, such as bedrooms, living rooms, and parlors, were made as a part of the study in drawing and art and sent to a near-by dealer, who supplied samples as nearly like the designs as possible to be studied at school. Rooms were measured, the required amount of paper was computed and the cost of papering each different room was found. The class worked at the problems involved with great interest, and soon found themselves able, not only to determine the types of paper best suited to various rooms but also to find the cost accurately and quickly. This line of study naturally led to the question of paints and varnishes, and much useful information was gathered concerning the composition and value of different brands. Color schemes for individual rooms were worked out, and suitable carpets, rugs, and curtains decided on. In each case materials and cost were taken into account, the girls learning many new facts concerning textiles and coloring stuffs and developing ability in household arithmetic. The reason why nature study, gardening, cooking, corn judging, the handicrafts and school excursions are the best basis for correlation is that they involve

[1] *Better Rural Schools.* By Betts and Hall.

practical and immediate interests and supply the necessity for language, spelling, arithmetic, drawing, etc.

Practical work gives the pupil something to *think about*, consequently he will have something to talk about and to write about. No better motive for prompting good oral and written English could be given, while the need for spelling words in daily use is easily accomplished through the written exercise. History and geography will also take on new meaning when studied in connection with home and farm problems, while proficiency in oral and silent reading will be attained because information in regard to the practical activities must be obtained from the printed page. The excuse of the crowded curriculum must be set aside, for instead of crowding out other studies, the home-making subjects absorb them and furnish a real motive for acquiring the facts which before conveyed little meaning in the life of the child.

2. The average one-room school building does not seem very hospitable to the introduction of Home Economics, for to many minds the subject is associated with laboratories and elaborate equipment. At first thought the preparation of food presents itself as the embodiment of the subject and false notions in regard to the requirements for this work arise. Much valuable work may be given with very little equipment but as in the teaching of other subjects it should be as adequate as may be afforded. The boxlike style of architecture of the one-room school will give way to something more modern in time, but the introduction of our subject cannot wait for this; beginnings must be made in the buildings now in use.

Where the preparation of food has been found feasible clever teachers have converted a cloak-room or a corner of the front of the schoolroom into a "kitchen" for the purpose. One teacher set aside the platform to this end, another erected a tent in the yard, while in many districts a lean-to has been erected. The lean-to or the possible basement room afford better opportunity for the practical work where classes are larger. In visits to many schools not one was found impossible from the standpoint of placing adequate kitchen equipment, while in nearly every instance the intro-

duction of the right phase of Home Economics would have resulted in more attractive schoolrooms and school yards. Like charity, Home Economics should begin at home, and in all cases the schoolroom should be the "home" during the introduction of the work. The making of the schoolroom a more beautiful and attractive place in which to live, and cleaning and improving the school yard offer splendid problems, the working out of which develops a desirable attitude of mind and creates an interest in school and school work quite out of proportion to the effort expended by the teacher or pupils. Through the work done in the schoolroom the principles of art and sanitation should find a way into the homes of the girls and where the teaching has been skillful this is bound to occur.

Instead, then, of offering poor schoolhouses as an excuse for excluding the subject from the curriculum they should form a nucleus for the work and should develop into attractive places where school work may be done.

The use of the "Teacherage,"[1] which is fast becoming popular as a laboratory for the home-making work, seems one of the best solutions from the standpoint of the subject. In the homelike environment which should here be found, all phases of home-making could be taught and applied. The motive to do good work would be great and the application of principles to a real situation would no doubt result in a more direct transfer of training into the girl's own home.

3. The large numbers of untrained teachers in our rural schools should cause greater concern on the part of all interested in the future men and women of our country than evidently has been felt, but not all rural school teachers are untrained. There are enough splendid women teachers in every county who if they understood the value of Home Economics, and chose to do so, could make their schools demonstration schools for a wide area. One good teacher bent on transforming her school from the old academic type into a "life school" could do more toward promoting the right kind

[1] *Teachers' Cottages.* Bulletin 27, 1915; Department of Education, State of Washington. *City Comforts for Country Teachers.* "Review of Reviews." April, 1917. By George Vincent.

of rural school and rural home than all kinds of home economics propagandists can do at long range. Through her influence the younger and less experienced teachers could be induced to attempt lines of work before thought impossible. The principle of contagion manifests itself in the work of the country school and in country teachers. Discussions of new lines of work at teachers' meetings, teachers' institutes, reading circles, and summer schools create an interest that often finds expression in new undertakings by the untrained teacher.

The professionally unqualified teacher really has no place in our rural schools, but so long as she is there all possible help must be given to supplement her lacks. With our present home economics extension service every rural teacher should feel free to call upon state and county leaders for help, and every home economics worker in the state or county should keep in special touch with the one-room teachers, for it is they who will most need help and advice in introducing and promoting home-making in the school, and who will in turn assist in all extension work with boys and girls.

Where teachers feel they cannot teach the subject it is often possible for several adjoining districts to employ a special teacher for the purpose, the number of districts depending upon distance, condition of roads, and other local factors. By sharing the expense of employing such a teacher excellent work might be accomplished in several schools.

In several rural communities, interested and able women of the neighborhood have undertaken to instruct children's classes at the school after school hours, and have created an interest in certain phases of home-making; practical cooking and sewing usually come in for a larger share of attention than other household activities.

The Crete plan[1] of work instituted at Crete, Nebraska, which provides for instruction of school classes in the homes of women of the town, the women acting as instructors, is another possible method to be employed in rural communities where distances are not too great.

[1] "Crete Plan." Department of Public Instruction. Lincoln, Nebraska, 1911.

In several states very effective work in Home Economics has been conducted by teachers in training in some near-by normal school. While this opportunity does not present itself to all localities there are those who have never thought of utilizing the means at hand. Rural schools, not too far distant from normal schools, agricultural colleges, and other colleges where Home Economics is taught, offer splendid fields for practice teaching and students would profit greatly through work of this kind. The close supervision of the teaching by experts in the field insures a better quality of work than the average untrained rural teacher could give. One half day each week devoted to the industrial and home-making subjects would be time well spent. No rural education department, training rural teachers, can afford to overlook opportunities of this kind; while to young women who are taking a home economics course the opportunity to give instruction in a rural school might become attractive community service.

4. Many a capable, progressive teacher has been handicapped in her desire to introduce new ideas into her school work because of unfavorable community sentiment. Many parents have been used to thinking of the school in terms of books and feel that an education consists of "book learning." However, this attitude is no longer universal even among conservative farmers. They are feeling the need of something better in education than their boys and girls are getting, and when they can be convinced of the worth of any new departure, they will give their moral and financial support. When necessary, sentiment in favor of Home Economics in the schools can be created in various ways; the teacher herself in her visits to the homes of her patrons and through talks at any meetings attended by the parents can do much; extension workers may exert a strong influence; local newspapers can publish articles telling its values; but probably the surest way of appreciating the worth of the work is to see results in the school itself. It is possibly safer and always easier, but not always necessary, to have the support of the community behind an undertaking, *if the teacher is sure she can carry it through.* And, too, much may be done in a quiet, effective way without having any disconcerting effect on the patrons.

*Suggestions for planning a course in Home Economics.* — In the choice of subject matter and practical work the principles suggested on page 288 should be kept in mind.

1. General survey course recommended. — Because many girls will have no further opportunity to take up any systematic study of home-making after leaving the country school it seems most advisable to give a cross section of the entire field rather than to limit the work of a detailed course in any one phase, *i.e.* cooking or sewing as is the tendency in some schools.

2. Basis for organizing series of lessons. — For the sake of administrative purposes it is wise to plan a series of lessons to extend over a period of two years so arranged that the work of neither year is dependent upon the other. This makes it possible for the girls in the upper grades to form a single class permitting new pupils to enter each year without repetition for those who remain. This plan is easily carried out by arranging the work on the short unit basis. Several short units based upon problems connected with food, clothing, the farm home and yard, care of children, the family and home ideals can be so organized as to give opportunity to study all phases of home-making. The organization of the series of lessons must depend entirely upon the problems undertaken by the school and it calls for the most serious and careful planning on the part of teachers. Each teacher should feel free to organize the work to meet the needs of her own school and should be able to defend her organization. She should consider the needs of her pupils, and of the community, as well as their interests and abilities and should try to build the home-making work into the regular school curriculum.

One teacher may find it most satisfactory to base her lessons upon the school lunch; another may find the seasonal activities on the farm a good basis; while yet another may find that beautifying the schoolroom and school grounds affords good opportunity to teach principles in connection with making the home and dooryard more healthful and attractive; neighborhood industries such as fruit-growing, dairying, stock-raising, cotton-growing, etc., often offer a basis for valuable studies in connection with food, clothing, etc.

In general the amount and quality of home-making work done in any one-teacher rural school will depend upon the vision and ability of the teacher. She should be encouraged to attempt only what she can qualify herself to do well, but some work should be begun in every school.

3. What shall I teach? — Many rural teachers are eager to introduce the work into their schools but do not know how to proceed. They want a direct answer to the question, "What shall I teach?" This may be answered in part by asking in return: "What should a girl of fourteen years of age know about food, clothing, caring for her home?" "What does she already know?" and "What can you teach her?"

In answer to the first question, in connection with food, our eighth grade graduate should have an appreciation of the values of foods commonly used. She should know how to plan, prepare, and serve simple meals utilizing these foods singly or in simple combination. She should know how to care for foods properly and how to utilize left over and surplus products. In addition she should have an interest in problems of production and distribution through a study of the food industries of her own locality.

Many country girls help in the daily preparation of meals at home and will not find the actual manipulation of materials and utensils as difficult as the average city girl. This makes it possible to give more time to learning principles underlying the processes of cookery and to the study of food values, etc. It will be necessary to keep in mind the conditions under which the girls must work in their own homes and help them to adapt what they learn to their own situations. The standards should be kept a little above, yet within reach of the families represented.

The foods commonly used, or that should be commonly used, and whose values and place in the dietary should be appreciated are readily listed. Fruits and vegetables, cereals, milk, eggs, meat, and beverages constitute our food supply and afford the basis for any work in foods and cooking. Just how the individual teacher will attack the study must be left to her to decide. Where the school lunch is established the food lessons should make a direct

contribution to the preparation of the lunch, but where this is not possible the home meal may serve as the basis for a series of lessons. "What shall we have for our school lunch?" or "What shall we cook for breakfast?" — either problem can be used to serve practically the same purpose.

The value of fruit in the diet and the use that the body makes of it can be taught in connection with the baking of the apples or the canning of the peaches whether for immediate consumption at noon or whether for use in connection with another meal. The same is true of all other foods.

For the sake of discussion let us assume that the unit of food work is to be based upon the preparation of some dish to be served as a part of the school lunch; what might the course include?

If proper food combinations are to be made, there should be a knowledge of the body's needs and of what foods will meet these needs. Properly directed, it should not be long before children will be able to list the foods that give strength for work, that supply building and repair material, and that serve as body regulators. By keeping these lists on charts, or on the board, before the class and seeing that each list is represented in each luncheon, the children will soon get into the habit of analyzing their luncheons and other meals as well, to determine whether or not they are good. By planning the luncheons a week ahead, the part brought from home can be made to supplement the hot dish prepared at school.

In the planning of lessons an effort should be made to utilize available food in season, to provide for recurring and modified sequences of lessons for the sake of varying the lunches and for the sake of reviewing and repeating processes. Holidays and all festal occasions should be utilized for some special lesson. The proper nourishment of the child should ever be kept in mind and every effort should be made to establish good eating habits.

With all of the above considerations in mind some suggestions in regard to sequence and subject matter connected with foods may be of help. Remember it is to be adapted to situations, not adopted.

Because certain foods will be most valuable as supplements to the child's lunch and will no doubt be most frequently repeated

during the year they should be studied as early as possible during the course. Every one is agreed that fruits and vegetables should form a part of the daily dietary of children. Early in the fall, then, the canning and storing of fruits and vegetables, while they are still plentiful, should be taught. The composition of common fruits and vegetables and their value in the diet may be emphasized during the practical lesson in canning the tomatoes or peaches, or while the alternating layers of carrots or other roots, and sand are being put into the box to be used later in the season. Practical lessons in the cooking of vegetables in a variety of ways may be provided for during the school year. Their generous use in the child's dietary during the winter will be of greatest value. Creamed vegetables, vegetable soups, scalloped vegetables are all easily prepared and by planning ahead it will not be difficult to provide potatoes, turnips, carrots, beets, celery, onions, canned tomatoes, etc., depending upon the locality. If vegetables are not easily obtainable, there is even greater need for a campaign to interest farmers in their production and in their daily use as articles of diet especially where there are growing children.

Milk is another food which should be included in the daily dietary of school children, and where school lunches are prepared should appear more often perhaps than any other one thing. A study of milk as a food never fails to be of interest. It is easy to demonstrate its value as a food to country boys and girls, but strange to say many need to be encouraged to use it. If each child could be encouraged to bring a pint or even a half pint of milk to school each day, and during the cold weather this could be made into cocoa or cream soup, or a part be used in the preparation of cream sauce for vegetables or eggs on toast, there is no doubt of the good effect upon the physical condition of the pupils.

In addition to the study of the value of milk as a food and its proper preparation, the care of milk and milk products in the home, the care of milk dishes, and the need for cleanliness in the handling of milk should be emphasized. Country boys and girls frequently milk the cows and should be made to feel their responsibility in keeping the milk supply pure.

Many interesting studies in connection with the dairy industry could be made by the school which would be of worth to the community. A Babcock tester could be brought in for a short time and the worth of the milk cows in the community proved. Problems in arithmetic would present themselves and there is no doubt that immediate contacts between home and school would be made.

The worth of skim milk, butter milk and sour milk and whey are not difficult to demonstrate when once the composition of milk is understood. The value of cottage cheese and other cheeses as good tissue-building material should be taught and provision should be made for their frequent use in the school lunch.

The principles underlying the cooking of cheese can be learned in connection with the preparation of the dish of macaroni and cheese or cheese fondue or cheese soufflé, any of which make good additions to the school lunch.

A study of cereals should find an early place in the unit of food work. In the fall of the year when the winter wheat is being planted or when the corn crop is being harvested the interest in this farm activity should be utilized. Why the wonders of that grain of wheat and that kernel of corn have not been revealed to all country children is a mystery! The entire school should be engaged in studying some one of the many phases of grain production and the industries that grow immediately therefrom.

In connection with our work the composition of cereals, their value as human food and especially as food for school children, and the preparation of attractive and palatable cereal dishes should be taught. Where there may be a dislike for the plain cooked cereal it may be modified by the addition of fruit in season, or made into attractive desserts. The dish of hot, thoroughly cooked oatmeal served with nicely baked apple, and the bottle of rich milk will make the school lunch on a cold crisp winter's day a feast to be remembered. No one from choice would go back to the cold fried egg sandwich or the cold biscuit with the piece of cold fried meat after such a treat!

A fireless cooker made by the pupils will make it possible to serve hot cereal as often as they wish with very little trouble. One of the

pupils could prepare it before school closed in the afternoon, put it into the cooker, and pay no attention to it until morning when it would need reheating.

Country children invariably use eggs in their lunches whether they are high priced or not. The hard-cooked egg and the hard fried egg sandwich are found in many little tin lunch pails. Why not have each child bring the egg uncooked some morning, and through the preparation of an egg dish for luncheon teach the underlying principles of egg cookery? Scrambled eggs, creamed eggs, custards, even omelets might be attempted each in their turn during the year. Eggs are frequently much abused in the culinary process and as for variety in their preparation there is very little. Studies in the production and preservation of eggs might be made. Instruction in handling and storing could be given. It is possible pupils could be interested in forming poultry clubs and in connection with club work all kinds of problems would come in for consideration. Different phases of the subject would of course be studied at the proper season of the year.

The use of meat in the diet and the principles underlying its preparation for use would have special interest for country children during that midwinter event on the farm — butchering time. An understanding of the structure and composition of meat should make quite a difference to the girl the next time she cooks it for the home meal. Frying may give way to other methods of preparation when once there is an understanding of the principles underlying the cooking of meat.

The making of soups and stews, possibly the broiling of steaks or chops over the glowing coals in the big schoolroom stove, offer suggestions for "practical lessons."

The care of meat in the home, the preservation of meats, the study of the carcass to understand the cuts of meat, afford interesting and valuable topics for study. Boys and girls who are members of pig clubs would have an added interest in the whole subject of meat production and there should be no difficulty in interesting them in the problems concerning consumption. There is great need for more scientific methods of curing and caring for meat in

the country and possibly when it is given some attention in school, progress in the right direction will be made in the home.

A study of tea and coffee should find a place in the course of study. The making of the beverages, their place in the diet, and the proper care of the tea-pot and the coffee-pot should be taught. The use of these beverages for the noon lunch should not be tolerated, but there will always be occasions when parents and other adults gather at the schoolhouse and on which occasions children may have opportunity to prepare beverages as a part of the refreshments.

The above suggestions based upon the study of simple foods do not preclude the making of any simple and desirable combinations of food products. Provision for learning to make bread, cake, and other flour mixtures, salads, and desserts, should be made wherever possible. Should the school equipment not permit, the preparation of various dishes at home, undertaken as home project work, should be encouraged. Every country girl should know how to make good bread and should understand the reasons for the various processes. A study of yeast and other leavening agents can be made and once their nature is understood the young cook may secure more uniform products. Bread contests and other cooked food contests may stimulate groups of girls to their best efforts. Emphasis, however, should be placed on common foods well prepared rather than upon elaborate dishes of any kind.

Whenever food is prepared at school, and especially is this true if the hot lunch is a school feature, attention to service should be given. The individual service should be placed upon the pupil's desk, unless a long table may be provided, and the entire school should consider the luncheon period a matter of school routine. Table manners and social customs are easily taught.

Cleaning up after lunch gives all kinds of opportunity for teaching various phases of housework. Washing dishes, caring for left-over food, disposing of garbage, sweeping the floor, cleaning the stove, washing the dish towels, are all necessary pieces of work and if wisely distributed will not be a burden to any one. Even the teacher after the work is organized should have part of the noon hour free.

In connection with textiles and clothing the girl of fourteen years of age should be able to construct any simple garment in her own wardrobe. This means she must have a knowledge of the fundamentals of hand and machine sewing and of the simple processes necessary to garment construction. Through a properly organized series of lessons in school a girl can become acquainted with the making of seams, hems, plackets, bands, and buttonholes, suited and applied to an article or garment of real use. She should have some appreciation and understanding of the use of simple patterns gained through the use of commercial patterns rather than through drafting them.

She should know how to care for her own clothes, to hang them up, to air them, to patch, to darn, to remove common spots and stains, to wash and iron and put clothing away properly. She should be able to assist in the selection of clothing, basing her choices upon the principles of hygiene, art, and economy. Good taste in dress should be emphasized. All of this necessitates a limited knowledge of textiles which should be acquired through the handling of different textile materials in the making of various articles.

This program, seemingly extensive, is not at all impossible when distributed through eight years of school work.

The child's desire to make articles for her doll house and for her doll, to make gifts, to contribute her part to the making of dusters, holders, towels for school purposes, to make bean bags, bags for marbles, and other things having a real use, should be utilized and should motivate lessons in textiles and sewing during the early grades so that more thought and effort may be given to the girl's wardrobe in the upper grades.

It may take some time to introduce as much as suggested into the average rural school program, but the fact that some phases of the home-making work have already been introduced makes the future outlook hopeful. The Red Cross activities undertaken by rural schools are proving the possibilities of the clothing and textile work and should be used to make clothing problems a permanent part of the school curriculum.

Great care should be exercised in the choice of projects lest there

be too much repetition of processes at the expense of learning something new. The work in sewing can be made to have real educational value and unless it has, school time should not be given to it. Here, as in the work with foods, instruction in subject matter and in regard to new processes may be given at school while the garment itself may be finished by the girl in her own home. This is especially desirable where there is a repetition of the same process in the garment, and where the child has demonstrated her ability to perform the work. Practice at home should be encouraged. Sewing contests and exhibits are desirable. High standards of work and good taste in the choices of materials and design should be emphasized.

Simple studies in regard to the farmhouse and the farmyard are of sufficient importance to find a place in any rural school curriculum. How to make them healthful, convenient, comfortable, and attractive are problems that even very young children can consider. One need not have had very extensive training to be able to conduct lessons which should lead children to give thought to those things that contribute to healthful living, and toward making the home comfortable and beautiful. The schoolroom frequently affords a good motive for attacking lessons of this kind. Such problems as the proper disposal of waste and garbage, the need for good ventilation, the source of water supply, the proper cleaning of rooms are not difficult to attack. Clean-up days, fly campaigns, fresh-air clubs, etc., started at school must find their way into the homes and will ultimately result in improved health conditions. The factors that contribute toward making the home comfortable and convenient should likewise be given attention. The older girls will find it interesting to study the arrangement of equipment in the kitchen and possibly in other rooms as well as to see what might be done to reduce the number of steps or to lighten the work in some other way. Attention should be called to some of the simple labor-saving conveniences such as the fireless cooker, the iceless refrigerator, the window box for food, the wheel tray. These are all easily constructed conveniences and offer excellent projects for boys and girls alike. Many school teachers have

been responsible for introducing these household devices into their communities. Where home-making is taught, the school itself will find need for having these as a part of its equipment.

To health and comfort must be added beauty. The effort to beautify one's environment is everywhere seen, but altogether too frequently is misdirected. To make the house beautiful one should understand how to choose and how to arrange everything that goes into it. Only a few lessons will be found possible, but these might include the choice of suitable wall paper for given rooms; the choice of pictures; the selection and hanging of curtains and the choice and arrangement of furniture. Work of this kind will at least suggest to the child the necessity for giving these things intelligent thought and will influence her choices and her home practice.

One skillful teacher taught this unit of work in a one-room rural school, using the schoolroom itself to carry on the practical work. She and her pupils worked faithfully during an entire term to beautify the dingy, neglected room. Together they decided upon wall paper, floor and standing finish, and the curtains, and together did most of the actual work required to transform the room into something really attractive. The buff walls, the dark stained floor, the refinished furniture, the white sash curtains, the made-over window shades and the bright, attractive window boxes created atmosphere and a liking for school never before experienced. The girls and boys in this group had much to carry with them into their homes, and the school board, reluctant at first to permit work of this kind, was quite willing that other phases of Home Economics be introduced. Every teacher can do something to beautify the schoolroom and to establish some principles which the pupils may apply in their own homes.

In considering the home and the family as a part of the home-making work we take up the phase which deals with human relationships rather than with material things. The home is more than the house, and the attitude of the members of the family toward it differs from mere ability in providing for creature comforts.

It is quite essential that the rural school do its share in creating

and promoting in the boys and girls the right attitude of mind toward their homes and the community in which they live. There should be developed in the minds of the pupils through conscious effort on the part of the teacher greater appreciation of the spiritual and social values of the home and the family.

This may be accomplished in part by providing many concrete situations which give pupils an opportunity for practicing and expressing those characteristics which need developing. Assuming responsibility, practicing hospitality, exercising unselfishness, originating pleasures, and cultivating thoughtfulness for others are all learned through the doing, and a wise teacher will provide occasions that will give the pupils opportunity to develop those characteristics that make for real worth while members of a community.

Right relations established in school and in the home will be felt in the community. Pride and interest in the community are assured only when some time and effort are put into doing something for it. Here again the teacher should encourage children to enter into some community enterprise or where there seems to be none, seek to discover some interest and help to promote it.

Developing attitudes of mind and appreciation of human relationships cannot be taught abstractly but must be acquired in connection with concrete situations and the home-making subjects can be made especially rich in affording opportunity for practical application.

To illustrate, the preparation and serving of the noon lunch accompanied by the necessary regard for others and the attending courtesies that must be shown; the giving of a party to the parents, for which occasion special preparation has been made, and at which time the pupils act as hostesses; the packing of a box of clothing made at school for some one less fortunate; the planting of trees and flowers on the school premises to increase the pride of the community in their school are types of exercises that develop not only ability to do, but that stimulate desirable emotions and help to habituate children to the right kinds of conduct.

Having in mind the possibilities that the field offers and ap-

preciating the needs and interests of her school group, each teacher will have to give her own answer to the question, "*What shall I teach?*" This is the really important question that each teacher must ask herself and the answer to which will depend more upon her ability, initiative, resourcefulness, and originality than upon any other factors. The needs and interests of the children must always have first consideration. These will furnish the motive for the choice of work undertaken and will differ according to individual schools.

Very earnest efforts are being made in various schools to incorporate home-making work into the curriculum and it is gratifying to know that there is an absence of any cut-and-dried procedure.

One school finds it more worth while to attack food problems because of the general interest in food production and conservation; another finds greater interest in clothing problems because of Red Cross activities; yet another finds that the school building and grounds need attention and confines the work to beautifying the premises. The hot lunch in another school offers the basis for the course of study, and so throughout the country various modes of attack and procedure are followed.

The teacher must have long vision and direct the interests of her group so that a rather comprehensive program will be worked out in time, but there should be great freedom of choice in individual situations.

No one has as good opportunity to unify the work of the entire school and to correlate all subjects to the extent that the one-room teacher may do it. This factor opens up great possibilities for the home-making activities for they at once serve the added purpose of revitalizing and making worth while all of the other school subjects and create an interest in school work which makes it carry over into real life.

**Home Economics in the consolidated school.** — *Conditions favorable to good work.* — The problem of introducing, organizing, and teaching Home Economics in consolidated rural schools becomes a comparatively simple one for, as a usual thing, the conditions are rather favorable.

1. Community sentiment. — The very fact that consolidation has taken place implies an interest in educational affairs and indicates a progressive spirit on the part of the patrons which makes it easy to introduce those subjects that modern education has recognized. Community sentiment usually favors the introduction of Home Economics and only becomes unfavorable to the work when it is poorly organized or poorly taught.

It is for this reason that a school board should employ a strong teacher when the subject is first introduced. Later, after the subject has proved its value a poor teacher may be condemned on her own merits, but will not carry the subject to ignominy.

2. Qualified teachers. — The possibility of employing a well-qualified home economics teacher naturally enchances the possibilities of the subject. Where the number of teachers employed warrants the employment of one who can give her entire time to the special subject, the classes are fortunate, but there are many small schools employing two, three, four, or more teachers who will have many lines of work to look after. To make the work really strong it is imperative that at least one will have had special training in Home Economics in addition to training for her other work. The handling of special classes then becomes a problem of skill in arranging classes rather than one of teaching the subject. As a usual thing where a special teacher is not provided it is more desirable that an upper grade teacher handle the home economics work as it will be the upper grade girls who will take the work and there will be less disturbance of classes. However, a better plan, where the size of the school does not warrant the employment of a specially trained teacher on full time, is for three or four schools to employ a teacher, dividing her time and sharing the expense of her salary.

This arrangement will prove more satisfactory all around as the teacher of regular academic work does not usually have the time, training, nor inclination to give the home-making subjects the attention they require.

The very fact that consolidated schools attract strong teachers makes it possible to plan for good work in Home Economics, for the

mutual helpfulness of all teachers is a great factor in the teaching of any grade and any subject.

3. Buildings and equipment. — Another great advantage that the consolidated school has is that of being able to make suitable provision for laboratories and equipment. No graded rural school can afford to put up a building these days without considering modern educational requirements in terms of Home Economics and agriculture. Where inadequate buildings have been constructed additions are not impossible and separate buildings for the conduct of home economics classes might well be recommended.

An ideal laboratory in which to teach this type of work would be a well-planned, well-constructed farmhouse, adjacent to the school building, equipped after the manner and means of the patrons of the community, showing possibilities within their attainments.

This house could serve the double purpose of laboratory for class instruction, and home for some of the teachers. In addition it could be utilized by the patrons of the community and would offer suggestions for all kinds of home improvement, household devices, and conveniences. The kitchen with its sink, wheel table, and well-selected and conveniently arranged furnishings, the laundry with its stationary tubs, running water, and other labor-saving devices, and the bathroom with its complete equipment would be studied by every housewife in the community as well as by the girls at school.

The possibilities of the installation of modern plumbing, including facilities for heat, light, and running water, could be demonstrated and studied. Motors for pumping water, washing the clothes, churning the butter, washing the dishes, running the sewing machine and cleaning the carpets could be introduced and girls and women could be taught how farm drudgery may be reduced.

In addition to the actual work within the house the country girl shares in other types of work. The vegetable garden, the flowers, the chickens, all call for a part of her time.

The farmhouse and farmyard offer the ideal situation for the teaching of home-making and the other activities in which the farm girls should be interested, but where these are not feasible the regular school laboratory should be provided.

The greatest care should be exercised in equipping this laboratory. The equipment should be adapted and suited to the needs of the *farm* home, not the city apartment. If wood and coal are the fuels used in the homes, wood and coal ranges should be installed. If oil stoves are used in the homes, when heat is to be eliminated, that type of stove should be provided, so that the greatest efficiency may be secured. Not that other types of equipment should not be installed and studied, but that ability in handling the home equipment to best possible advantage be insured.

*Adaptation of subject matter.* — The principles underlying the selection and organization of subject matter for the graded rural schools do not differ from the principles given in Chapter VI of this volume, *Home Economics in the Elementary School.* The whole problem becomes one of adaptation — the selection of problems based upon home and community needs so graded as to meet the child's interests and experiences. The teacher of Home Economics should familiarize herself with the entire school curriculum and with the home conditions and industrial activities of the community in order to motivate her work properly and to make conscious connections between the home and the school.

The suggestions given in Chapter VI, page 112, relative to work in the elementary school are applicable to the rural consolidated school. The problems of the country girl will differ from those of the town girl and this must be kept in mind. Lessons in regard to food should be attacked from the standpoint of the farmer's family and should be adapted to the local situation. The subject matter given should supplement the girl's knowledge and should be definitely and immediately applicable. To illustrate, it is quite important to teach city girls how to select and to buy foods. The country girl, on the other hand, needs to learn how to get the products to market in an attractive and salable manner. Economic problems may be reserved for more advanced grades but seventh and eighth grade girls can undertake some very definite practical problems. The storage of eggs, the handling and packing of butter, the use of suitable containers for special foods illustrate the point.

In the making of menus and the serving of food the country girl's problem will differ from that of the city girl. The difference in the actual work performed by the farmer and his family calls for a difference in dietary requirements which is sometimes disregarded by the uninitiated teacher, while the problems of service need not consider what may be done by one maid or two, but rather should include the making of some labor-saving devices to lighten the work of the already burdened housewife. The city girl may learn how to care for the refrigerator, so may the country girl, but maybe it will be more necessary to learn how to construct a window box for cold storage or to make an iceless refrigerator.

The city girl may learn the need for cleansing the outside of the milk bottle before emptying the milk, the country girl may have greater need for instruction in regard to the handling and care of fresh milk.

In connection with studies in regard to the house and home life, the farmhouse and home life in the country must be considered.

A study of the site, with reference to drainage, outlook, sun, and air; of arrangement of rooms with reference to their use by the farmer's family; of furnishings suitable to the surroundings should give the girls some well-defined standards of the characteristics of a comfortable and attractive home on the farm. Certain emphasis on the care of the cellar, the attic, the "spare room," the "parlor" should be included. Lessons on the care of the bathroom may give place to more needed lessons on the construction and care of a sanitary toilet.

Lessons in system and efficiency in housework if included must be based upon a knowledge of the many duties of the farmer's wife and daughter, and should aim to give very simple constructive suggestions, rather than to leave the pupil with vague theories that seem to be inapplicable to her situation.

The work on the budget so generally accepted as an essential phase of all well-organized home economics courses should be given very different treatment when presented to country girls than is usually given to the girls whose families live on stated salaries. There is very evident need for placing money values on all kinds

of labor contributed on the farm and in the home, and on the foods and other supplies used by the farmer's family, and for recording the financial standings of the farm business. Girls of school age have already become interested in business accounting through the work of canning and agricultural clubs. Plans for the wise expenditure of money should become quite as important a feature as plans for production, and every girl, whether she handles her own money or not, should have an appreciation of the commercial value of the food and clothing used by her family, the cost of the upkeep of her home, and should appreciate the need for saving against a time of need.

In former times, the farmer's wife and daughter had access to very little actual money (neither had the farmer), but present conditions are bringing changes which encourage farmers to conduct their business after approved business methods, and the present generation of girls have need for good school instruction which will give them the right attitude toward the business of the farm and home and their part in promoting and maintaining the business.

Special time may be given for instruction of this kind or it may accompany the work in foods and clothing and housework. Its importance should be recognized and its place in the course of study should be definitely planned.

The lessons in sewing and textiles for this group will not differ much, if at all, from those given to other elementary school children (see page 113).

Questions of economy, conservation, hygiene, and art can all be taken up in connection with the construction of garments. Each requires its own emphasis. Because of their isolation many girls living on farms do not have opportunity to study clothing from the standpoint of becomingness of color and line, and often the art work in the schools has not given attention to art in dress, so it may be wise in some cases to give this phase special attention, not to the neglect of any other, but in addition to the others.

Another very worth while phase of Home Economics deals with the social and recreational needs of the family. In rural communities the home is the social center for the family and the mother and

daughters should feel the responsibility of providing those things that will satisfy the social natures of the members of the family. There must be a unity of family interests to hold the group together and make them enjoy family and home life. These interests must be discovered and must be provided for. Games, music, conversation, reading aloud, story-telling, make for interesting and attractive evenings and girls should be made to feel that it is quite as much a part of home-making to be able to plan pleasures for the family as to satisfy the so-called material needs.

No doubt the best way to develop this idea is to provide these different types of recreation and sociability for girls in school with suggestions as to how to introduce them at home. Having parties, planning picnics, celebrating birthdays, anniversaries, and holiday occasions help to enrich life and make for the kind of home and school atmosphere that boys and girls enjoy and remember. Planning for these in school often suggests something that may be done by the girl in her home and puts a bit of pleasurable excitement into routine school work.

Extending hospitality to and planning pleasures for others is but an expression of the same spirit extending to a larger group. It is quite essential that boys and girls of school age be given opportunities to make social contacts and that they become familiar with recognized social customs and conventions so that later when it becomes necessary to mingle with other groups it may be done with greater pleasure and less embarrassment.

**Home Economics in the rural high school.** — *General introduction.* — 1. Community interests should be reflected in the school. — The high school attended by boys and girls, whether in small country towns or in the open country, should aim to reveal and interpret country life in such manner as to make boys and girls eager to remain on the farm because of the great possibilities that agriculture and life in the country have to offer. The natural aptitudes, inclinations, and needs of pupils should always be kept in mind and there should be no disposition to narrow the horizon, nor to limit their possibilities, nor to keep boys and girls on the farm if there are greater opportunities for them elsewhere. But the

usual type of high school too frequently takes for granted only one goal on the part of its graduates. It permits a large majority of pupils to drop out at the end of the first or second year without recognizing the real reason, and without adjusting its program to the needs and interests of the pupil. It frequently fails to take into consideration the need for contributing quite directly to the community and for doing its large share toward the upbuilding of the agricultural industry. If indeed the rural high school is to be the "people's university," agriculture and home-making, — the life and industry of the community, — must be the core of the curriculum, and the other subjects be made to contribute to their better understanding.

It is not difficult to say what should be done and to outline courses of study for ideal situations, but to make these work under conditions as they exist is a different proposition and should lead first to the study of remodeling and reorganizing many schools. New programs of study, more adequate equipment, and teachers qualified to teach their special subjects are essential to effective work.

2. The school should not be confined to the building. — The inadequate academic equipment will have to be enlarged. The school building and school grounds will have to extend into the community. Near-by farms, dairies, stockyards, poultry farms, orchards, gardens, and even homes, should be made available for school use.

3. Special teachers are needed to do effective work. — The teaching staff must include teachers qualified to teach Home Economics and agriculture. The small high school is usually undermanned because of financial conditions, but the present availability of state and federal funds for vocational purposes makes it possible to add teachers of vocational subjects.

Heretofore in some small high schools teachers with very little or no training in Home Economics were expected to teach the subject and as might be expected the subject was not given its full value.

4. A unified curriculum is essential. — However much the special teacher of her subject is needed, some of the most far-

reaching work with students of Home Economics must be done by teachers of other subjects. There must be a coöperative staff studying various phases of home and community life, who will have to plan and apportion the work to meet their situation. Teachers of civics, economics, science, mathematics, agriculture, and Home Economics will have to give help to each other in order to strengthen the work of the school.

To illustrate, the use of food in the home is only one phase of food education. We expect this to be treated directly in the home economics classes. But are there not problems of production and distribution that should be equally well understood and that would put farm women in sympathy with the larger food problems? Are there not facts and figures in connection with the food produced in a certain area which if compiled, would cause increased pride in the community or stimulate activity in greater production?

Would not a study of the institutions in the community make for better understanding of community activity, and lead to fuller coöperation in community undertakings? A real understanding of rural social, economic, and industrial conditions through the working out of some given project is quite within the grasp of high school students and will contribute to the making of women who will better understand their responsibility in the home, and the relation of the home to the community.

The science work in a rural high school should be especially strong and alive and should tie up very intimately with the home economics work (see page 73). The city girl may study her household physics and chemistry for appreciation, but the country girl has daily opportunity to make application of her knowledge and will appreciate its worth because of the added efficiency it gives to her. One reason why so many country homes are without labor-saving devices is that women have not known what to ask for and have felt that all mechanical household conveniences were more trouble than they were worth only because they did not understand them. Household physics and mechanics should give this knowledge and should give enough practical work to prove to the girl that she can use it.

Remote from the plumber, the carpenter, the tinner, and all other tradesmen, the country woman has to depend upon herself in emergency or be greatly inconvenienced. Some practical work with pumps and traps, soldering iron and carpenters' tools, etc., would be time well spent and by many greatly enjoyed.

The teacher of agriculture also has much of practical value to give to the high school girl in order that she may be a more efficient home-maker. It would seem very desirable to offer several short units of various phases of agriculture to the girls, not for vocational agriculture but for vocational home-making. The vegetable garden, the flower garden, the small fruit, the poultry, and bees are in many places cared for by the girls and women who feel a real need for more training in order to do their work better. They are getting it through extension service, but why not include the study of these in the regular high school work and let the students carry on certain projects at home?

Men on the farm like to concern themselves with the big things of the farm while women have to take the initiative in connection with such things as suggested above. If some agricultural work especially adapted to the home economics group could be provided, many phases of home improvement would be assured.

In addition there should be opportunity for studying phases of agriculture for definite vocational agricultural purposes. This is discussed later in the chapter.

Read pages 73 to 79 for further suggestions on correlation of studies in high school.

*Organization of courses.* — The basis for the organization of the work in Home Economics must be carefully determined and the goals of these girls as indicated in the previous chapter must be kept constantly in mind. A variety of ambitions may be represented but these may be cared for by modifying courses planned to meet the interests of the majority rather than by providing separate courses for each group. In all probability three groups of girls will be represented: (1) those who expect to go to college, (2) those who expect to remain on the farm to engage in home-making or in agricultural pursuits, and (3) those who are preparing to teach in the

rural schools. In addition, the home economics teacher should keep in mind, and plan for, the girls and women of the community who might be interested in Saturday or evening classes.

1. For the girls who may attend college. — The high school would render a great service if through its teaching it could influence the girl who goes to college to return to the country to exercise her leadership. The college woman is badly needed and if high school girls could be made to feel that they as college graduates might find pleasurable and profitable employment in the country, they might pursue very definite courses while at college which would fit them for various phases of rural leadership. For this group the high school home economics course would be of the general type that functions as liberal education, and should aim to develop appreciation and to set standards of living. Further it should open up to the girl the economic and social problems with which country people have to deal through a definite program of community study. The dependence of country life upon other rural conditions makes it necessary that country women understand those conditions and appreciate their part in changing or in maintaining them.

Standards of living in the country, as elsewhere, depend upon economic conditions, and improvement comes only after the crux of the situation has been reached. The regular study of the home-making activities should always be approached from the standpoint of the farmer's home, and the girls should be expected to apply what is learned at school and if unable to do so, report the difficulties.

Such work as is outlined on page 180, modified as necessary, serves as a guide in organizing the course for liberal education. Because of the immediate use to which country girls can put all of their home economics training they will no doubt wish to elect courses in the third and fourth year of work, even though going to college, and ample provision should be made for any advanced courses desired.

Country girls differ from city girls in their eagerness to learn and to utilize whatever pertains to their homes, because each girl shares in the home work and enjoys the added power her school study

gives, so where college credit may be given she will ordinarily offer more in Home Economics than the city high school girl.

2. For the girls who remain on the farm to engage in home-making or in agricultural pursuits. — Only a small percentage of the rural high school girls find their way to college and unless the high school work makes a strong appeal, a large majority drop out before completing the high school course. Some drift around for a time, many finally going to the city to find work. Others marry, and continue living in the country.

The girl who goes to the city is untrained for city work and loses much of the enjoyment of life because of her lack of training and lack of acquaintance with city ways. Had the possibilities of making a good living and an attractive home been rightly presented to her in her high school days, she might have remained on the farm and become economically independent and a woman of recognized value in her community.

It would seem that one of the most important functions of the rural high school would be to open up the possibilities of various lines of agriculture suitable for girls to engage in, and to give the necessary training for it. Such courses would be classed as vocational agricultural courses and would differ in length according to their nature and would require a definite program of study.

In all probability the girl or woman who engages in any agricultural vocation will combine it with quite as intensive home-making activity and will need a type of home economics training equivalent to vocational home-making. So it would seem that for the girl who remains on the farm to engage in agricultural pursuits, or in home-making, the rural high school should provide a strong vocational home-making course. This would follow the general plan for vocational home-making outlined on page 152, adapted to the rural situation.

There are many ways in which the home work on the farm differs quite materially from that in the city and a teacher in a rural high school must understand the local situation.

Many farmers' wives and daughters are still great producers in their homes, and need help in applying the best and most modern

methods to the home industries, or possibly they need proof that some of the work they are doing could be eliminated entirely.

In some schools it may be very necessary to teach girls how to make good butter, how to cure meats, how to make soap, etc., while in other neighborhoods it would be more to the point to study the feasibility of establishing a coöperative creamery, of producing and selling more hogs and buying pork, of disposing of the waste fat and buying commercial soap. The value and best disposition of time and energy must always be given due consideration, and students should be led to *study* activities, not merely to engage in them.

All of the hard work in the farm home should be reduced to a minimum and high school girls should be led to see possibilities of overcoming seemingly obstinate obstacles. Lack of funds may be responsible for retarded home improvement in many places, but the lack of ideas is usually the root of the matter. A part of the function of the high school is to develop ideas and to help the individual to accomplish his undertaking. The home economics teacher should keep this in mind and should encourage the girls to bring in their individual problems and help them to work them out.

3. For prospective rural teachers. — Many rural high schools will offer teacher-training courses and if these are up-to-date some home economics work will be included. This gives the wide-awake home economics teacher a chance to extend the influence of her work indefinitely.

In organizing the work of this group she must keep in mind the type of school the student will probably teach and should give such practical work and subject matter as these girls may later use in their teaching. The course should be rich in suggestions for the organization and conduct of home-training work in the country schools, but will, because of time allowance, be limited to the elements in so far as technical work and subject matter are concerned. Practice in organizing and presenting a series of home-making lessons in a near-by country school should be one of the interesting features of the course. (Read pages 136 to 141 for further suggestions.)

4. For extension classes. — To be of greatest service to the community the rural high school should establish an extension teaching department. Young men and young women wishing to take up various lines of study should find the high school prepared to organize classes for their benefit.

The home economics teacher may find herself confronted with the organization of such classes and should welcome the opportunity even though it may crowd her work temporarily. The courses given will vary as the groups and the community.

The demand of the class may determine the nature of the work as in the case of a group of rural teachers who asked the high school teacher for a series of lessons which would help them to install the hot lunch in their one-room schools; or it may occur to the teacher that certain needs could be met by offering definite units of work in a regular series.

The administration and organization of the work would be very similar to that suggested on page 183. There is no surer or better way of vitalizing the home economics work in any school than by getting women interested in taking up some phase of study at school. When the school becomes a real factor in community life there is not much doubt as to the progressiveness of either school or community, and it is just this spirit that will make for better farms, better homes, and better living in the country generally.

*Vocational education for country girls.* — In arranging the rural vocational education program, adequate plans should be made for the country girl. Like other girls, the country girl is not content to remain in her present economic position. She, too, wishes to exercise her earning capacity and if life in the country cannot furnish her with wage-worthy work she will do what others before her have done — go to the city to find it.

All will grant that the vocation of home-making and assisting with the housework are the most essential and constructive pieces of work that farm women can perform, and it is conceded that every girl should have opportunity to pursue such studies as will make her efficient in the home, but rarely is a girl regularly paid for this kind of work. This naturally leads her to desire to engage in

some employment in addition that is of seeming consequence to her, and which will give her money of her own in return.

There are many suggestions for vocational opportunity growing out of the home economics work given in a previous chapter which may be adapted and applied to the rural situation.

Opportunities growing out of the food and the clothing studies are especially great for the country girl. She has already had much experience through the work of the canning clubs in producing and marketing a limited variety of food products. This nation-wide education has opened up possibilities which should encourage every girl to experiment along other lines. The home economics teacher should be able to assume the responsibility for teaching the preparation of foods for market, but as a usual thing she is not able to teach scientific methods of production.

This is the point at which the teacher of agriculture can be of help. It should be possible for a girl to enter vocational agricultural courses to get training in whatever special phase of agriculture the locality permits, and which she is able to undertake. Units of work should not only be offered but teachers should encourage registration in such classes. The work should be pursued until the girl feels competent to engage in the pursuit as her own enterprise.

Some of the lines of agricultural activity that girls are able to take up are poultry raising, bee keeping, truck gardening, floriculture, the raising of small fruits, some phases of dairying, etc. Nothing should be undertaken by the immature girl that will overtax her physically. Possibly by entering into partnership with her father or brother who might provide some of the muscular energy, other types of farm work than those indicated may be undertaken, but she should be assured her part of the profits.

In addition to the production of animals and crops, the problem of putting them on the market and other phases of business must be understood.

If girls were encouraged to begin in a small way, and were taught the value of investing their profits in developing and enlarging their business interests, there is no doubt that many would be only too glad to continue life on the farm and in so doing would find it pos-

sible to make a good living and a good home. Unlike many of the occupations pursued by the city girl, the country girl engaged in agricultural pursuits has the benefit and protection of her home and in most cases, except during busy seasons, will contribute to the home.

The exercise of the earning capacity of the young girl with all that this implies in the way of organization, management, and business ability, will do as much to improve the homes of the country as any course in Home Economics may do, for after all the quality of the country homes depends upon the conscious power felt by the women in those homes. A part of that power is generated when the interests of home and farm are one and when the farmer's wife becomes his actual business partner, able to understand all that pertains to progress on the farm and to claim her full share of the profits for the use of her home and her family.

The following list[1] of occupations that girls in different parts of our country are engaged in may be suggestive to teachers who wish to be of help to girls living in the country.

I. Animal husbandry.
   1. Raising chickens, pigeons, ducks, geese, for feathers and for sale.
   2. Raising chickens, for eggs.
   3. Raising dogs, Angora cats, pigs, calves, sheep.
   4. Raising bees.

II. Gardening.
   1. Raising flowers for sale to summer boarders.
   2. Raising tomatoes, cabbage, other plants in hot beds.
   3. Raising strawberries, blackberries, raspberries.
   4. Raising apples, cherries; taking care of some trees on father's farm.
   5. Raising vegetables, garden truck, peanuts.

III. Personal service (out), working by hour, day, or week.
   1. Waiting on table at hotel.
   2. Expert waitress for parties.
   3. Caring for children during parents' absence.
   4. Caring for sick or amusing convalescents.
   5. Going shopping for those unable to leave home.

[1] Taken from *The Home and the Family*. By Kinne and Cooley.

6. Being a companion to old people or reading to old or blind.
7. Assisting neighbors with cleaning, cooking, laundering, etc.
8. Sewing.
9. Catering for parties.

IV. Personal service (at home).

1. Taking summer boarders, or regular boarders.
2. Taking children to board.
3. Laundering fine shirt waists for summer boarders.
   General laundry work.
   Laundering baby clothes and fine lingerie.
4. Preparing gift packages for Christmas and birthdays, or country products tied up daintily, for sale at exchanges or gift shops to be sent by parcel post.
5. Preserving jellies, relishes, etc.
6. Baking cake, cookies, bread, rolls.
7. Candy making.
8. Maple sugar and sirup.
9. Cheese making — cottage cheese attractively done up.
10. Butter making — fancy prints, buttermilk, cream.
11. Catering. For teas, suppers, picnics, church parties.
12. Salad dressings, as a specialty.
13. Soap making.
14. Preparing for automobile parties.
    Lunch counter.
    Tea room.
    Lunch boxes.
    Dinner boxes.
15. Drying fruits, peeled or plain; drying sage, thyme.
16. Making baskets, drying balsam, making balsam pillows, corn-husk mats.
17. Weaving rugs and braiding mats.
18. Sewing and dressmaking.
19. Millinery.
20. Making specialty of children's clothes or shirt waists, or house dresses or other specialties much used in neighborhood.
21. Repairing and remodeling clothes.
22. Knitting or crocheting to order, or for stores.
23. Shampooing and hairdressing, at home or shop.
24. Starting library at one's home, small fee, begin with few books.

25. Curing hams and bacons.
26. Raising and gathering nuts.
27. Starting canning club.
28. Preparing Sunday dinners to be delivered.
29. Peanut raising.

V. Using automobile or horses.
1. Transportation of summer boarders.
2. Carrying children to school.
3. Auto parties.

## SUGGESTIONS FOR STUDY AND REVIEW

1. List the educational agencies in your community. What are the aims of each? How are the aims accomplished?

2. In what respects does the rural school of your community to-day differ from the same school of twenty years ago?

3. What changes have taken place in the other institutions of your community? In what way and to what extent is the school responsible for these changes?

4. What is meant by reorganizing rural education? What changes do you think necessary?

5. To what degree is the rural home responsible for rural improvement? To what degree is it a factor in keeping boys and girls on the farm?

6. What opportunities for social life have the women and girls in your community?

7. What are some of the domestic problems along which they might like help?

8. What can you do to interest them in the organization of a county farm bureau and the employment of a home demonstration agent?

9. Discuss the value of club membership for girls living in the country.

10. Compare the value of regular home economics instruction in schools with that obtained through club work.

11. How may club work and school work be combined? Suggest several home-making projects for which school credit might be given.

12. What reasons have you for thinking that some phases of Home Economics should be introduced into your rural school? Formulate plans for its introduction.

13. Notice the lunches your pupils bring to school. Are they suited to the needs of the child? Are they well balanced, palatable, and attractively packed?

14. What plans could you make for providing some hot food for your own and the pupils' lunches?

15. Call the parents of your pupils together and discuss the possibilities of the hot lunch with them.

16. Of what value will the hot lunch be to your school aside from providing hot food at noon?

17. What subject matter will you endeavor to give in connection with the food preparation?

18. Plan a series of ten lessons in food, based upon the hot lunch. Send it to a home economics specialist for criticism.

19. What other phases of home-making can your pupil undertake to study?

20. Compare the home economics work done in a graded rural school with that done in a graded city school. Why the differences?

## REFERENCES FOR COLLATERAL READING

The Country Life Movement. Bailey.
Chapters in Rural Progress. Butterfield.
The American Rural School. Foght.
Country Life and the Country School. Carney.
The Challenge of the Country. Fiske.
The Church in the Open Country. Wilson.
The American Country Girl. Crow.
One Woman's Work for Farm Women. Buell.
The Healthful Farmhouse. Dodd.
Report No. 103. — Social and Labor Needs of Farm Women, United States Department of Agriculture.
Report No. 104. — Domestic Needs of Farm Women, United States Department of Agriculture.
Report No. 105. — Educational Needs of Farm Women, United States Department of Agriculture.
Report No. 106. — Economic Needs of Farm Women, United States Department of Agriculture.
Education for the Home. Andrews. Part II. United States Bureau of Education.
School Credit for Home Work. Alderman.
Food and Health. Kinne and Cooley.
Clothing and Health. Kinne and Cooley.
The Home and the Family. Kinne and Cooley.

## CHAPTER IX

## HOME ECONOMICS IN OTHER ORGANIZATIONS WHICH CONTRIBUTE TO THE EDUCATION OF THE GIRL

I. Organizations other than schools which contribute to the education of the girl along lines of Home Economics.
   A. Religious and philanthropic organizations.
   B. Welfare work in factories and department stores.
   C. Girl Scouts.
   D. Camp Fire Girls.
   E. Girls' clubs.
   F. Junior Red Cross.

**Organizations other than schools which contribute to the education of the girl along lines of Home Economics.** — It would be difficult, indeed, for the wide-awake girl of to-day to pass through life with no appreciation of the relation of the home to the welfare of the nation; with no inspiration toward the improvement of her own home and toward her own responsibility in accomplishing these better home conditions. Not only does the school offer work in Home Economics, but all organizations which have as their aim better and more efficient womanhood include as part of their program either specific courses in Home Economics or the stimulus for attaining skill and working principles in relation to the home and its activities.

Perhaps to no teacher of Home Economics comes remuneration of greater satisfaction than that which came to Miss Mabel Hyde Kittredge, the head of the Housekeeping Center Association in New York City, in the establishment of a new home by one of her pupils who patterned it after the "model flat" in so far as she was able.

It is an important part of all instruction in this field to project the ideals and processes into the actual present home experience of the girls; for only through such results can home economics

teaching be justified and worthy of future development. Further discussion of this phase of the subject will be found in Part IV. It is sufficient to say at this point that special effort should be made by every teacher to understand the home conditions of the girls in her classes, and to encourage free discussion of home problems as part of the regular class work. It is a tragedy worthy of note that a teacher of home management in a city high school found cause for annoyance in the fact that the girls in her classes were not content with a lecture course, but insisted on general discussion.

It will readily be seen that in all teaching of Home Economics a classroom acquaintance with the girls' homes will not be adequate. Provision should be made for home visiting on the part of the teacher; and this phase of the work must lose its formality if it is to be of the greatest value. Definite time should be planned for this contact with home conditions. This applies to the teaching of Home Economics under school direction as well as the work in settlements and girls' clubs.

The war has played no small part in promoting the educational work of organizations other than schools in the field of Home Economics. Although it was well started before our own country entered the conflict, the work of the extension field was greatly stimulated by the great need for food production, and food and clothing conservation. The unlimited demand for Red Cross supplies provided work for home economics classes throughout the country, resulting in the establishment of Junior Red Cross chapters. Opportunities for making baby layettes and garments for the destitute and refugees in the countries of our allies have stimulated the use of the needle, and knitting, almost a lost art, has been universally revived. And so the field of Home Economics widens, and with it comes the need for greater adaptability and more advanced training along all these lines of activity so closely knit to the lives of men, women, and children in all walks of life.

No specific definition of the aims and ideals of the work in Home Economics as offered by these various organizations is necessary for they have as their goal the same objectives as the regularly

organized school work, — training for the best type of woman who will be able to assume her responsibilities in the maintenance of the best type of home and family life, and will be awake to her opportunities, to extend her sphere to the " larger home " with its many demands for intelligent housekeeping methods.

Teaching as a field of service has been greatly enlarged by the demand for instruction in these organizations. While similar training is necessary as a basis for entering the different fields, it is especially significant that the personality and interests of the individual are given opportunity for best expression if wisely selected with a view to meeting the peculiar needs of the various organizations. To illustrate, the woman who enters the field of teaching in Y. W. C. A. work must espouse the principles for which the organization stands, and must have as a dominant interest the creation of a home and social atmosphere for the girl whose great need may be the home influence and experience which is in part denied her because of her remoteness from her own home, or her daily absence from it because of her occupation. Furthermore, the teacher in these classes must have the power to centralize interests of various groups of girls. It may be said, in passing, that one of the great by-products of these agencies is their power for democratizing womanhood whose interests and upbringing are most varied.

To illustrate still further, the woman who enters the field of Girl Scout work should be chosen with a view to her interest in the girl in her out-of-door life as well as her development for general service. She should not only be adapted to " roughing it," but must find actual joy in the doing of it.

Thus it will be seen that with the widening scope of Home Economics there has come to the teacher of Home Economics an increasing opportunity to exercise her own peculiar powers, if she will select with care the type of work which most appeals to her own interests and abilities.

*Religious and philanthropic organizations.* — Perhaps no phase of the girl's education has received more attention at the hands of these organizations than education for the home.

1. The Young Women's Christian Association in its educational program includes classes in Home Economics adapted to meet the demands of all who apply for enrollment. Training in all phases of food study is offered, and dressmaking and millinery classes are usually found in the schedule.

The Central Branch of the Association at 600 Lexington Ave., New York City, makes the following statement:

> The educational work, established in 1873 will be continued and greatly enlarged in the new building under the name of the Ballard School. New practical training courses will be offered for the new occupations and professions rapidly opening to girls and women. . . . Over 50 per cent of the total enrollment last year was in courses for the better administration of the home and the care of the family. With our space and technical equipment we offer many new opportunities for practical instruction in these fundamental vocations for women.

In addition to providing training for home-making which is the vocation or avocation of almost all women at some period during their lives, the teaching of Home Economics offers a practical avenue for reaching the hearts and spiritual interests of girls and women. The Y. W. C. A. has recognized this, and through these classes reaches many women in attaining the aim as expressed by the central branch of the association:

> The aim of the Young Women's Christian Association is to develop the highest conception of Christian womanhood and to aid women in realising this conception:
>
> By bringing to them opportunities for all-around development.
>
> By utilizing every available resource of the community for their interests.
>
> By offering itself to be used by the community in coöperative service for women.

The different branches of the Young Women's Christian Association offer work in Home Economics with different objectives. The St. Louis Association states, as its aim:

> The object of the school is to train women that they may better maintain themselves or that they may become more efficient home-makers. . . .
>
> Since the management of a household is the occupation of most women, no subject of study can be of more importance than Household Economics or domestic science. We have a well-equipped kitchen and dining room for the domestic science classes, and provision is made for all classes of

women, for home-makers and business girls, for mistresses and maids, for prospective teachers, and even for children.

It will be observed that classes in clothing and millinery are included in the schedule, planned to meet the needs of students who expect to teach Home Economics, as well as those students who wish to apply the principles in the home. Millinery is taught "for normal students, and open to others who wish to learn the trade or who wish to use it for the home."

The schedule of classes offered by the St. Louis Association follows:

SCHEDULE OF EDUCATIONAL CLASSES

1914–1916

Y. W. C. A.

St. Louis, Missouri

Household science:
- Teachers' training, 1st year.
- Teachers' training, 2d year.

(A) Domestic science:
- Plain cooking.
- Advanced cooking.
- Home course — whole term.
  - First term.
  - Second term.
- Supper classes.
- Luncheon class.
- Dietetics.

Maids' and cooks':
- Plain cooking.
- Serving.
- Marketing.
- Accounts.

(B) Domestic art:
- Special sewing.
- Plain cooking, and two days' sewing.
- Plain sewing (hand work).

Plain sewing (machine work).
Pattern dressmaking.
Drafting.
Embroidery.
Evening sewing.
Course in textiles and designing to be arranged.
(C) Millinery:
Trade course.
Home course.
Evening millinery.

The aim of the Boston Young Women's Christian Association, School of Domestic Science is definitely vocational in nature.

The following quotation is taken from the "General Statement" of the school for 1917–1918:

The Aim. It aims to give fundamentally scientific and practical instruction in all that pertains to the home and its management, that women may be fitted to teach domestic science and domestic art in public and private schools, in institutions, hospitals, and homes; to be workers and teachers in settlements, Christian Associations, and charitable organizations; to be superintendents, supervisors, dietitians, tea-room managers, matrons, housekeepers, and home-makers. These are, in general, the fields of usefulness entered by those graduated.

2. Social centers.—The social settlement is rapidly becoming an invaluable agency in the education of the girl. Its goal is the improvement of home and neighborhood conditions; and with this aim a vital part of the educational program of the settlement should be training in home-making. In most modern social centers are to be found classes in home-making for young and old. The nature of work offered depends in part upon the needs of the classes. The organization of the work in the best ordered centers is in charge of a supervisor, who may be a woman trained in Home Economics but who *must* be a woman who understands the home conditions of the girls in the classes, through contact with the homes, and who can evaluate the work of the teachers of home activities in the light of the needs of the classes.

It is especially important that home-making in its broad sense be presented to classes in settlements in order that there may be an

appreciation of the importance of all phases of home management, of home ideals, and of the relation of the individual home to the community; it is essential that classes be provided for girls and women of all ages.

These courses may be offered in units of work for mothers or more advanced students in day or evening classes, if desired (the length of each series to depend upon the needs of the class and the demands of the subject). The following units may be suggested:

(1) "The Making of Breads and Cakes."
(2) "How to Make One Pound of Meat Serve for Two." (A series of lessons on Meat-Extenders.)
(3) "The One-Dish Meal."
(4) "Bringing Last Year's Dress Up-to-date."
(5) "John's Discarded Shirts. What Are They Good for?"
(6) "'My Money Won't Reach' — How Can I Stretch It?"
(7) "How Can I Make My Family a National Asset?"
(8) "The Care of Children Is a Patriotic Service. How Can I Take the Best Care of Mine?"

For the younger pupils in the settlement class, it is suggested that the work be made as practicable as possible, with the constant application to home and individual needs. In teaching sewing, it is obvious that the actual making of articles rather than the abstract teaching of stitches is more in line with present-day life. While the average class in settlement work needs the garments to be made, the opportunity should not be lost to foster the interest in service for others by making some articles for those less fortunate than the girls in the classes.

In teaching foods to the children in settlement classes it is especially important that the national and religious tendencies be considered and provided for. The Americanization movement should not be construed to mean the elimination of all foreign habits, customs, traditions; but rather the absorption of the best of them into American life. It should serve to teach the best methods of preparing the foods which the family fancies from the standpoint of hygiene and nutrition. Furthermore, the teacher of

Home Economics in a settlement should acquaint herself with the dietary laws as affected by the religion of her pupils and strive to meet them in planning her lessons. Surely the maintenance of the Hebrew faith for the Hebrew girl is worthy of a teacher's careful search for Kosher meat, and the use of only meat or milk in the same dish or meal; and the observance of fast days gives excellent opportunity for teaching the use of fish to the Friday classes. Herein lies an important need for the home survey. In order to avoid the absurd situation of teaching the Russian service to children whose table service is limited to the removal of a jelly sandwich to the street for its consumption, the teacher of the settlement class should plan to serve occasional meals, and should know the existing customs in order to help the family to advance *gradually* to the next level of table service. There is a true story of a boy in a settlement cooking class who offered his services for laundering it if his mother would discard the customary newspaper in favor of a tablecloth.

Coöperation should be the keynote of the work in Home Economics as developed in a settlement. Unless there is unity of interest and action on the part of workers and community the influence of the settlement cannot be felt. The successful teacher of Home Economics in the settlement will utilize so far as possible the services of the women in the homes in teaching home-making. Greater confidence will be felt in her judgment and knowledge if she recognizes and utilizes the skill of the Italian mother, who will be happy to show the girls in the classes how she makes noodles; or if the mother successful in caring for her new baby is invited to show how she bathes and dresses her baby. This tactful teacher will not be characterized as was one young teacher by a woman who had attended her lecture on the care and feeding of babies, and who sensed her own superiority due to experience, — "Hm, *she* tellin' *me* how to care for my children, *me* who's had six and lost five!"

Relative to this coöperation of the mothers of the community is the following quotation from a pamphlet which tells of the work of a community center in New York City:

In the sewing club was developed one of the things that are most valuable in the community center. Mothers of the neighborhood came in and helped to teach the children. They did this for the pure pleasure of helping. The children brought their own materials and Mrs. G—— one of the mothers of the neighborhood, taught them how to make the things they wanted. They made their own costumes for the closing day exercises. Cheesecloth was given them and they did their share by supplying tinsel, braid, ribbon, and lace. The delighted interest of these children making these costumes was a splendid thing to see. These same sewing children made all the arm bandages for the "First Aid Group."

It requires patience and faith to await results in the teaching of settlement classes, for there is the conservatism of centuries to face; but as a phase o work which contributes to the general ultimate uplift in the home there is no more remunerative field of home economics work.

A unique and effective organization which may be cited under social centers is the school which has been established in Quincy, Illinois, by Miss Ethel Irwin as a memorial to her sister. Her own statement follows:

### *The Virginia Irwin Memorial School*

The aim of the school is to help people of limited means solve their clothing problems as rapidly, as efficiently, and effectively as possible. Young girls who have left school, and who are not quite mature enough to go into wage-earning occupations, come in the mornings; the mothers and homemakers, in the afternoons; and for the girls who work during the day, there are night classes. Each individual is privileged to come from one to four times a week. There are few rules, and no "prerequisites" for entrance. Nothing is said about regular attendance, but there has been a quite spontaneous amount of it, because of the imperative need for the garment. No undergarments are made, simply because actual dressmaking presents as many problems as one instructor and an assistant can possibly manage. The attendance, during the one and one half years that the school has existed, has varied from sixty to one hundred individuals, depending upon the season. During that time three hundred and eighty-five satisfactory garments have been completed, good colors and simple designs have been encouraged, and the students have been gracious in their consideration and acceptance of these rather unfamiliar ideas. Without formal class instruction, it has been possible to teach simple designing from plain commercial patterns, and though the final product in material was sometimes poorly sewed, for reason of an almost entire lack of previous experience upon the part of the individual sewer, the effect was worthy because the design was simple and interesting.

There is still much to be accomplished, but the school is a private enterprise, and it is hoped that it may remain informal, individual, and uninstitutionalized for some time to come, so that the aim may be more fully and rapidly realized.

The "model flat" or housekeeping center as a laboratory for the teaching of home-making in social centers has become almost indispensable. It is by all means the best setting for the teaching of home-making to such classes because it eliminates the imagination necessary in "thinking the process" into the home, when the lessons are given in kitchens and sewing rooms equipped for individual work.

Furthermore, all home activities may be taught under conditions approximating those of the homes from which the pupils come. A demonstration of the very effective use of the "model flat" is work that is being accomplished through the "Association of Practical Housekeeping Centers," New York City. There are centers in New York City at present, established in communities where the need for instruction in home-making is great. Miss Mabel Hyde Kittredge, President of the Association, makes the following statements in the "Report of the Work for the Season, 1917":

In 1901, this Association was formed for the purpose of educating homemakers. Housekeeping centers are model homes or practice houses where this education is carried on.

In 1912, a public school principal asked the privilege of sending pupils to one of these centers. This was the beginning of our coöperation with the Board of Education of New York City.

Total number of pupils being instructed in the seven centers, 1917, over 4000 weekly.

SPECIAL ACTIVITIES OF THE ASSOCIATION

Preserving perishable foods.

Neighborhood relief work.

Preparing gifts and clothing for soldiers.

Interpreting civic problems for foreigners.

Club work done after school hours.

Mothers' teas and mothers' sewing classes.

Supper classes where working girls pay for and cook their own suppers.

Information centers for food problems, especially for foreigners.

Use of centers by present and

Bathing facilities in all flats for pupils and neighbors.

former pupils for social gatherings.

Summer classes formed on request. Teacher always on duty.

The "Mothers' Helpers," a home-making neighborhood work at 518 East 16 St., New York City, is an organization under private direction. In her own home Miss Annie W. Strathern holds classes for girls, from the "very little ones, those too small to leave the sidewalk before their own doors," through the working girls' groups. The aim of the work is better homes, both physically and spiritually, and hence stronger womanhood.

The use of the club organization has proved every effective in teaching Home Economics in settlement classes. Typical of such organizations are the budget clubs which were established among girls and women in New York City for the purpose of helping them to readjust their budgets to the extreme conditions occasioned by the War. These clubs operated in the settlements and various women's and older girls' groups of the city.

It will be evident that many of the problems of home-making are those of men and boys as well as of women and girls. Therefore every opportunity for teaching groups of men and boys how to solve these problems should be seized, with the inevitable outcome that home-making will be a more efficient business.

A recent development of the social center idea is the utilization of the public school as a community center. An understanding of the aims and purposes of the organization may best be understood by reading the bulletin written by Henry E. Jackson, special agent in community organization.[1]

The bulletin should be read at length in order that the breadth of such an influence in the life of the girl may be shown. The possibilities for work in Home Economics are unbounded; and the teacher who enters such a field of service should be sufficiently alert and ingenious to recognize and appropriate every chance for

[1] *A Community Center*, Bulletin, 1918, No. 11. By Henry E. Jackson, Special Agent in Community Organization, Department of the Interior, Bureau of Education.

the activities of the community center to serve as a feature of education for the home.

3. Church schools. — Although there has been a great advance in the nature of the work offered by many church schools, this perhaps is one field which has lagged behind in some respects in the teaching of Home Economics. This may be due in part to the tendency to "leave well enough alone," especially when past methods have necessitated the minimum outlay of money.

The early work in "cooking" and "sewing" was taught in after-school and Saturday classes under the jurisdiction of churches. The work was usually planned and executed by women of the congregation who volunteered their services. The teaching of stitches on small bits of cloth or "samplers" proved interesting to the children, and made pleasing little records of work accomplished. The preparation of one dish by the teacher, as a demonstration, or by the class as a group, comprised the lesson in the preparation of food.

It has become evident that such lessons, although they functioned to a degree in educating the girl in the arts of sewing and cooking, were not adequate; so that the most progressive schools under church direction have found it wise to employ trained teachers of Home Economics to plan and direct the work of the school. However, it is not always easy for the teacher thus employed to modernize the work of the classes. Only through tact and patience can she expect to reorganize the work of the conservative school to the point of the actual making of garments and other articles; the opportunity for more individual experience in cooking; the introduction of other phases of home economics work along the lines of home management, care of children, food values, textile study, and budget making.

It is peculiarly significant that one of the great needs as expressed by foreign missionaries is for training in the applied principles of home-making which will enable them to add this phase of teaching to their efforts for mental, moral, and spiritual uplift in their fields of work.

The International Association of Daily Vacation Bible Schools,

90 Bible House, New York City, according to its statement, 1918, "uses idle churches, idle students, idle vacations, to fit idle children for good citizenship." Its field of activity is worldwide. In its program for "making young democracy safe," the following organization is suggested:

A typical school. A fully equipped school has four student teachers regularly employed and paid, one man who serves as principal, and three women who have charge respectively of the music, manuals and kindergarten departments. This staff is supplemented, where possible, by volunteers. The term is for six weeks, beginning on the Monday following the Fourth of July. Sessions are held daily except Saturdays and Sundays, the forenoon being devoted to organized school work and the afternoon to supervision of outside games.

4. Orphanages and other institutional homes for girls. — The modern institutional home for girls provides special education in Home Economics. Although it is difficult to provide the home environment, the modern orphanage approaches the home atmosphere through the use of the cottage system instead of the one-building scheme. In the case of one orphanage, twelve girls at a time are given rather intensive training in Home Economics under family conditions by becoming members of a family group under the wise direction and instruction of a house mother who plans and directs their work in the activities of the home.

The superintendent of a state home for girls writes:

The training in domestic science at the Home is a sort of community matter. We have a meeting of the staff once a month and these things are talked over and planned at that meeting. We have a class that meets every afternoon, which we call the art class, in it the girls learn to do all kinds of fancy work, both for the Home and for personal adornment. We weave rugs and cane chairs in addition to the other work. The girls paint walls, ceilings, and floors and whitewash cellars, make cement walks, and raise truck for food.

In our dressmaking room we do custom dressmaking but only do this for people connected with state institutions. Two of our girls go down to a dressmaker's in town, come home every night and on Saturday night bring their wages.

Nine of our girls go to the public schools in Trenton. One has gained first honor in her class and two have gained second honors. We board ten girls in private families so that they may have additional time to give to their studies and become assimilated sooner to outside conditions. Two teachers come in three times a week from the public schools to give

special instruction to our more advanced girls looking toward their entering high school.

In the New York Orphanage, Hastings-on-Hudson, New York,[1] the cottage scheme of organization provides training in homemaking under fairly normal conditions; for the girls and boys in each cottage comprise a family, every member sharing in the preparation of meals and the care of the house.

Garment making, dressmaking, care and repair of clothing, laundering, etc., are taught as a part of the girl's education. Especial emphasis is laid upon the training of girls for strong citizenship through the home and community responsibility, special credit being given for community service.

The following statement appears in the annual report for 1917:

> The greatest need in the world for every orphan child is a home. Without it he is poor indeed, whatever else may be given him. Our first responsibility therefore is to provide good homes, for these are the foundation and environment of happiness, usefulness, and culture. Our ten cottages are beautiful buildings, well equipped and provided with every convenience for comfortable, wholesome, and refined home life. The children of each cottage function coöperatively and helpfully in all of the daily routine of care, service, study, and recreation. Cottage interest, tone, and spirit constitute the largest asset in the uplifting influence of the Orphanage. Our ideal is to give to these girls and boys the care, experience, and training we should want our own children to receive.

*Educational work in factories and department stores.* — Within the last decade the commercial world has come to recognize the economic value of home economics education for women in their employ. They have evidenced this appreciation by the establishment of classes in Home Economics as a phase of the welfare work under their direction. An extension of this type of work is found in the publicity work of a large life insurance company which distributes among its patrons literature designed to increase efficiency and to prolong life through a knowledge of the laws of health and hygiene.

The phases of home economics work which should be most generally emphasized in welfare work are: personal and community

[1] For description see, *How Two Hundred Children Live and Learn.* By R. R. Reeder. Published at Hastings-on-Hudson, New York.

hygiene, care of infants and children, food values and food preparation; choice and care of clothing, and some work in the division of the income.

To illustrate the method of presenting one or two phases of this work the following quotation is taken from *Department Store Education*, by Helen Rich Norton:[1]

It is the aim of the course in hygiene to give such instruction and training as will promote the physical well-being of the pupils, and thereby add to their comfort, happiness, and success. As with the other courses, the subject is first approached from the standpoint of the special conditions of the industry. One of the most difficult conditions is the necessity of standing all day, and it is patent that if anything can be done to lessen the fatigue thus occasioned, the pupils should know about it. That the style of shoes they wear and their weariness at night may bear any relation to each other has never occurred to most of them, whose choice of footwear is usually governed by the desire for a "pretty" rather than a comfortable shoe. After the anatomy of the foot has been described, with the aid of drawings and photographs, a dozen different styles of shoes, borrowed from an accommodating dealer, are shown. These may vary in style from a French-heeled party slipper to an extreme orthopedic model. The effect of each is carefully explained and the point made that footwear suitably worn with an evening gown is neither suitable nor safe for daytime wear by a girl whose work requires eight hours of standing. Many of the pupils make their first purchase of hygienically shaped shoes as a result of the simple but convincing talk. One girl who changed from cramping, deforming shoes to a pair built on a hygienic last, said that she "never dreamed that shoes could make such a difference; that she would be so much less tired at night as a result of the change."

In treating the subject of nutrition, the teacher considers the needs of her pupils as saleswomen, but sees in them also the future providers of households. An effort is made to stimulate an interest in wise buying, in economical methods of preparation, in clean, well-cooked, palatable food, and in a varied diet. The question of business honesty is brought up in relation to the choice of food and the circumstances governing its consumption. Every girl knows from her own experience or that of others that a person who is suffering from indigestion or headache or backache finds it difficult, if not impossible, to serve customers properly. Since the best physical condition that a saleswoman can attain is due her employer and her customers, it is clearly her duty to let judgment rather than whim control her choice in the matter of foods. When the assimilation of food is under discussion, the care of the teeth is emphasized, and afterwards the condition of her teeth is talked over with each pupil. If a girl needs the services of a dentist, but cannot afford to pay for this atten-

[1] *Department Store Education*. By Helen Rich Norton. Bulletin No. 9, 1917, Department of the Interior, Bureau of Education.

tion, arrangements are made for free treatment at one of the dental schools, and she is allowed time out of the school session for the necessary work.

The lesson on the nervous system resolves itself into a discussion of the best way to keep this delicate and indispensable mechanism in a highly efficient state. The value of fresh air, of eight or nine hours' sleep, and of a sufficient amount of the right kind of recreation is brought out. Consideration is next given to the practicability of obtaining the needed air and sleep and to the relative merits of the many forms of recreation indulged in by different members of the class.

Excellent suggestions for welfare work along the lines of Home Economics are offered by John Wanamaker Stores, Philadelphia and New York.

The following classes in Home Economics are provided for enrolled members of the "Women's League," for year 1917–1918, — cooking, dressmaking, crocheting and knitting, home-making, millinery, art embroidery.

*Girl Scouts.* — The Girl Scouts Organization may be considered as a stimulus toward, rather than a training in, Home Economics. In order to keep the "Promise" and obey the "Laws" of the Girl Scouts, home economics training is clearly essential.

THE GIRL SCOUT'S PROMISE

On my Honor I Will Try
To do my duty to God and my country,
To help other people at all times,
To obey the Scout Law.

From the Handbook[1] are quoted the following selections which will indicate more specifically the need for definite training in Home Economics. To those who are familiar with the girls' enthusiasm for the Girl Scout activities, it will be readily seen that work in Home Economics which is stimulated by these tests is highly justified according to present-day educational philosophy.

ECONOMY

More women are engaged in housekeeping than in all the other professions and employments combined. This is a difficult profession and re-

[1] *How Girls Can Help Their Country*, Handbook for Girl Scouts, Girl Scout National Headquarters, 527 Fifth Avenue, New York City.

quires knowledge and training, if good results are to be secured. Housekeepers need to have a plan, and especially a budget of expenses. One of the chief duties of housekeeping consists in seeing that there be no waste of any kind. The efficient housekeeper prevents a waste of food, of light, fuel, and of every other item. The wise individual gives special care to preventing a waste of time on the part of herself and others. The real orderly Girl Scout has a place for everything and keeps everything in its place. She has a time for performing each of her duties and does it at that time.

The following tests illustrate the relation of the work of the Girl Scout to Home Economics:

*A First-class Scout* (badge, sewn on left sleeve above elbow, which entitles the wearer to go in for all-round cords) must have gained a Second-class badge.

Must know how to set a table properly for breakfast, dinner, or supper.

Bring a shirt waist or skirt sewn by herself or equivalent needlework.

Be able to describe how to get to a specified place and walk one mile in twenty minutes.

Must be able to dress and bathe a child two years old or younger (see p. 118).

Be able to pass an examination upon the first three chapters of the woman's edition of the *American Red Cross Abridged Textbook in First Aid.*

Must have knowledge of signaling and of semaphore code or international alphabet (p. 75). Writing sixteen letters per minute.

Must have 50 cents in savings bank earned by herself.

Must produce a girl trained by herself in tests, Tenderfoot Class.

Know how to distinguish and name ten trees, ten wild flowers, ten wild animals, ten wild birds.

Must know simple laws of sanitation (p. 94), health (p. 95), and ventilation.

Again, in the work of the *Camp Fire Girls* the training in Home Economics is to all intents and purposes a means and not an end. And yet the ultimate result is the same, and the educational process is approved because of the conscious need which exists in the minds of the girls.

In the book of the Camp Fire Girls, entitled *War Call to the Girls of America,* are to be found statements which indicate the aims of the organization, and suggest the educational stimulus in the field of Home Economics.[1]

[1] *War Call to the Girls of America,* Book of the Camp Fire Girls, National Headquarters, 461 Fourth Avenue, New York City.

*Girls' Club Work*, as has already been indicated in Part I, Chapter II, has contributed very generously to the education of girls and women in many different phases of home economics training. It has been said that the tomato served as a key to the southern kitchen; for through the organization of canning clubs among the girls, the home demonstration work was given a great push in the southern homes.

As a result of the phenomenal success of the south in the organization of clubs, the girls' and boys' clubs have developed rapidly throughout the country. In many cases they are closely allied to the work of the schools; in this case the keynote of success lies in the sympathetic coöperation of the teacher and the director of club work.

As a means of promoting democracy and high ideals in business dealings the club has been a most important factor in the girl's education. Through competitive contests and the demand for high standards in products, much has been gained of integrity and just social and economic methods.

The Young Women's Christian Association[1] recognizes the value of the club organization as a means of promoting the best in womankind. Among the clubs of the Association may be found those for

(1) Girls in industry over 18 years.
(2) Girls in industry under 18 years.
(3) Older high school girls.
(4) Grade and junior high school girls.
(5) Small town and country girls.
(6) Country girls.

Information concerning the organization and conduct of these clubs may be secured by writing to the National Headquarters, 600 Lexington Avenue, New York City. Through their activities opportunities for education in relation to the home are manifold, and every advantage should be taken to utilize them.

Although all educational agencies responded heartily to the de-

[1] 600 Lexington Avenue, New York City.

mands of the war, along the lines affiliated with the efficiency of the individual and the home, perhaps no other made a keener appeal than the *Junior Red Cross*. It worked largely through schools, many of which are on record with a 100 per cent membership list; but it should be given special recognition at this point as a forceful agency in present-day education in Home Economics. It has afforded a great stimulus for the development of skill and efficiency, for the exercise of patriotic enthusiasm and for the encouragement of personal service toward the attainment of a great ideal.

As stated earlier in this chapter it is highly desirable that the teacher of Home Economics should know the opportunities for service in this teaching field, in order that she may not only utilise the various interests in her classroom teaching; but also that she may select for her own work that specific phase of teaching which will be most congenial to her and which will best utilize her peculiar powers.

In so far as possible, opportunity should be given to the student of home economics education to test her powers in several phases of work, *e.g.* in regular classroom teaching, in girls' club work, in extension work, etc., which may be offered by the community. It is important that a broad vision of the activities of the field of Home Economics be given to the teacher in training in order that she may realize the privilege which will be hers to coöperate with the other agencies which contribute to the education of the girl.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Suggest ways and means of making a survey of the homes and other educational agencies in a community preparatory to coördinating Home Economics with them.

2. Secure the literature available for distribution by the various organizations listed in this chapter and of others which contribute to the education of the girl. Discover ways and means of promoting interest in the teaching of Home Economics by coöperation with them.

3. Visit an up-to-date children's home and evaluate its power as an educational factor in education for the home.

4. Designate the educational advantages of Home Economics as offered by the various organizations discussed as compared with that taught in the average public school.

## REFERENCES FOR COLLATERAL READING

It is suggested that the class assemble the literature available in the various organizations mentioned and utilize this material in extending the scope of interest.

How Two Hundred Children Live and Learn. Reeder.

# PART III

## PLANNING LESSONS IN HOME ECONOMICS

## CHAPTER X

## SOME SUGGESTIONS FOR CHARACTERISTIC LESSONS IN HOME ECONOMICS

I. The necessity of planning for a lesson.
   A. All lessons worthy of forethought.
   B. The type of planning varies with teachers and conditions.
II. Some suggestions for characteristic lessons in Home Economics.
   A. Lessons given in detail as suggestive of the way they might be taught.
   B. A form of briefer plan.
   C. How plans should be used.

**The necessity of planning for a lesson.** — *All lessons worthy of forethought.* — To the teacher who is sincere in her work and truly successful the time never comes when she can appear before her class without having made definite preparation for the lesson.

*The type of planning varies with teachers and conditions.* — The form that the preparation takes will vary with the one making the plan. It may range from a brief statement of purposes in teaching the lesson and the three or four big thought-projecting questions intended to carry the thought forward, to elaborate and detailed plans covering the minutiæ of a lesson. It is needless to say that the latter is laborious and out of the question where a teacher has a number of classes each day, consequently some way of reducing labor must be sought while still assuring thorough preparation. For some teachers, especially those of maturity and experience, it probably will be sufficient to organize the material mentally only, putting down on paper merely the guiding questions; for others a carefully prepared outline of subject matter in addition to the questions will be found helpful, while for the inexperienced teacher it may be advisable to write out at least a

few lessons in full until she has acquired skill in caring for all the details.

The type of preparation which supervisors in colleges and normal schools require from their student-teachers varies greatly, some requiring the minutely detailed plan while others prefer the brief type of purposes and questions with some suggestion of method. With this latter type of preparation the details will be developed through personal conference, so that in the end the process has been practically the same but the physical labor of writing has been reduced to a minimum. The detailed discussion between the supervisor and the young student-teacher frequently results, however, in much of the work being done by the former instead of being a measure of the ability and resourcefulness of the latter.

**Some suggestions for characteristic lessons in Home Economics.** — In this section will be found some suggestions for types of lessons that should find a place in every well-planned course of study in Home Economics, given in detail as they might actually be taught. They are suggestive of the type of preparation which an inexperienced teacher might make for a time with profit to herself and her class.

### An Introductory Lesson on the Care of Clothing

I. Time Division:

Opening discussion, 25 minutes.
Demonstration and discussion, 10 minutes.
Practice on paper, 10 minutes.
Putting away work and summary, 5 minutes.

The Problem: We cannot buy many new clothes in war times. We must know how to judge whether a garment is worth mending and the best way to mend different kinds of rips and tears.

II. Aims:

*A. Teacher's purposes in teaching the lesson:*

1. To help children to form accurate judgments through a discussion of the relative worth of garments that have been brought in to be repaired for the Belgian and French orphans.
2. To encourage thrift and saving.
3. To introduce patching as one method of mending clothes.

*B. Pupil's problem:*

How can I repair garments sufficiently well that they may be sent over to little Belgian or French children?

| *Subject Matter (in condensed outline)* | *Method of Class Procedure (in detail as lesson might be conducted)* |
|---|---|
| Lesson assigned at previous meeting. | What did we say last time that we would do in this lesson to-day? |
| Bring garments to mend, to send to Belgian and French orphans. | |
| Reasons for care of clothing. | Are there any special reasons for taking care of our clothing at present? |
| 1. Saves money. | |
| *a.* Money may be invested in Liberty Bonds or W. S. S. | |
| 2. Saves fabrics. | |
| 3. Our discarded garments may be of service to others. | |
| Demand for textile fibers. | Why is it necessary to save wool, cotton, and linen so carefully now? |
| 1. Wool — clothing, blankets, etc., for the soldiers. | |
| 2. Cotton — uses. | |
| *a.* Surgical dressings. | |
| *b.* Gun cotton — ammunition, etc. | |
| 3. Linen — little raised now; needed in war industries. | |
| Sources of fibers. | Where has the United States obtained its fibers in the past? |
| 1. Wool — England, Australia, South America, Germany. | |
| 2. Cotton — its own southern states, Egypt. | |
| 3. Linen — Belgium, Russia, Germany. | |
| Scarcity due to: | What are other reasons for the scarcity of fibers? |
| 1. Needs of other countries for their own supplies. | |

2. Decreased production because of war.
3. Transportation difficulties, soldiers must be supplied and civilians must curtail.

Summary:

1. Saves money to be invested.
2. Saves materials to be used for war purposes.
3. Releases shipping needed for supplying the soldiers.

Who can tell me some good reasons why it is patriotic to make our clothes last just as long as possible?

Mending basket containing garments needing:

1. Buttons.
2. Holes patched.
3. Tears mended, etc.

Now let's look over this basket of clothes that has just come from the laundry and decide what needs to be mended and whether or not it is worth mending.

Value determined by:

1. Relative value of raw material.
2. Amount of wear remaining in garment.
3. Character of repair needed.
4. Amount of time it will take to put garment in condition.
5. Value of mender's time.

How shall we decide whether the garments are worth mending?

Patching.

1. Material for patch.
   - *a.* Similar to garment.
   - *b.* As much worn as garment if possible.
   - *c.* Large enough to cover hole and worn part around the hole.

Here is a place that we have decided needs a patch. What do we need to think of first in preparing to patch this garment?

How large must our patch be?

2. Preparation of garment.
   - *a.* Trim hole to regular shape by:
     - (1) Creasing on diagonals so they cross

How shall we get the garment ready for the patch?

Illustrative material.

Large piece of material or paper

| | |
|---|---|
| in imaginary center of hole.<br>(2) Cut along diagonals to corners.<br>(3) Turn back points along threads of material to make a regular shape, for (*a*) neatness of appearance, (*b*) less conspicuous appearance. | with hole in it and imaginary worn place marked around.<br>Crease as directed.<br>Developed through discussion between teacher and pupils, steps being worked out on illustrative material as they are developed.<br><br>Why do we take so much care to have this a regular shape, following threads of material? |
| 3. Preparation of patch.<br>*a*. Patch large enough to cover hole and worn place around hole.<br>*b*. Crease patch on diagonals as they cross in center of patch.<br>*c*. Place patch to wrong side of garment so that:<br>(1) Warp threads of patch are parallel to warp of garment.<br>(2) Filling threads likewise.<br>(3) Diagonal creases of patch coincide with diagonals of garment.<br>*d*. Pin patch to place. | Now that our garment is ready, how shall we prepare the patch?<br><br>Developed and worked out as above.<br><br>How can we be reasonably sure that we can place a patch correctly on this garment? (Practice on paper.)<br>Will you tell me just how you will get the garment ready for the patch, Mary? |

Summary:

Points on preparing garment and preparing and placing patch.

And how will you prepare and place your patch, Alice?

I shall give you ten minutes and I want you to see how many of you can have your patch placed and pinned in that time.

Class work, making and placing patch in paper.

Materials:

Two pieces of paper about 6 and 8 inches square. Larger square has hole cut in center and pencil mark to represent worn spot around hole.

Inspection and comparison of results.

Difficulties:

1. To get hole regular and even shape.
2. To place patch evenly and smoothly.

What difficulties have you found in placing your patch?

Those are things we will need to be careful about then when we come to patch our garments. You may pin your name on the garment you have, fold it neatly and put it back in the basket till next lesson when we will make the patch and learn how to repair these other rips and tears.

Class puts away work.

Summary:

1. Reasons for saving clothes.
2. How to determine if clothes are worth repairing, value of time.
3. How to prepare garment and patch and place patch to garment.

What have you learned to-day that is of real importance?

## A LESSON IN THE PREPARATION OF FOOD

*Project for the lesson:* To make tapioca custard pudding as a possible dessert for a coming luncheon to be served to the eighth grade girls.

*Time division:*

9.20. Tapioca put on to cook.
9.40. Final preparation of pudding begun.
10.10. Dishwashing.
10.25. Final summary.

*Teacher's purposes in teaching this lesson:*

1. To teach tapioca custard pudding as a means of reviewing the cookery of starch and protein foods and of teaching their combination in one dish.
2. To teach the children to apply knowledge already gained to a new situation through the development of the recipe for the pudding.

| *Subject matter in outline form.* | *Method in detail.* |
|---|---|
| Problem:<br>We are going to serve a luncheon to the eighth grade girls. What attractive dishes can we serve that will come within our allowance? | What is the problem on which we have been working for the last few lessons? |
| Home work:<br>Look up recipes for desserts suitable for luncheon and bring to class for this lesson. | What did we decide to do in preparation for to-day's lesson? |
| Discussion of recipes from point of view of:<br>1. Suitability for luncheon.<br>2. Time required for preparation.<br>3. Cost. | List of suggestions written on board by children. |
| *Tapioca Custard Pudding*<br>*Large* — *Individual*<br>4 c. scalded milk — 1 c.<br>6 tb. minute tapioca — 1½ tbsp.<br>½ tsp. salt — speck<br>2 or 3 eggs — ½ egg<br>½ c. sugar — 2 tbsp.<br>1 tsp. flavoring — ½ tsp. | Class votes on pudding to be prepared for next lesson.<br>Last week we decided upon Tapioca Custard Pudding to be made to-day. What shall we need for making this pudding? (Illustrative material, dish of pudding previously prepared to be used as a standard for the class.) |

1. Add tapioca to scalded milk, stirring constantly. Cook 15 minutes.

2. Add sugar to yolks of eggs, beaten slightly, and add hot mixture to this slowly so as not to cook eggs in lumps. Stir constantly.

3. Return to double boiler and cook until thick.

4. Remove, cool slightly.

5. Cut and fold into the mixture the well beaten whites, and flavor as desired. (By way of variation, this pudding may be poured over fresh fruit; or ½ cup of cocoanut may be added.)

Ingredients developed from children, based on previous work on soft custard. Teacher gives quantities.

Problems raised by this discussion:

How combine a starchy food, tapioca, needing long hard cooking, with eggs needing slight cooking at low temperature?

How shall we combine the materials for the pudding? Experiment:

Testing tapioca with iodine to show presence of starch.

Reference to printed recipe or cookbook to see what directions are given for cooking tapioca.

Assignment for home work.

What is there in the manufacture of tapioca that makes unnecessary the long, hard cooking usually used for starchy foods?

Will the tapioca be thoroughly cooked by this process?

References:

Food Industries, by Vulté and Vanderbilt.

The World's Commercial Products, by Freeman and Chandler.

The Story of Foods, by Forrest Crissey.

Summary:

How to put tapioca on to cook.

What directions shall we write on

| | |
|---|---|
| | the board for the cooking of the tapioca? |
| . . . . . | Class works (put tapioca on to cook). |
| | What other ingredients have we to add to our pudding? |
| Review of egg cookery, especially of soft and baked custard. | Why did we not add these to the tapioca and milk at the beginning? |
| Comparison of thickening agents in the two puddings: | Why do we use only ½ as much egg in this recipe as we did in the soft custard? |
| Soft custard, egg only. | |
| Tapioca pudding, egg and tapioca. | |
| Preparation of egg. | Is there any difference in the way the egg is prepared for soft custard and for this custard? Teacher shows process as a standard for achievement of class. |
| Egg white beaten separately. | |
| Cut and fold into custard. | |
| Summary | What shall we add to our directions on the board to finish our recipe? |
| Directions of finishing custard. | |
| Points 2–5 in recipe above. | Class works (finishes pudding and sets to cool, scrapes and piles dishes, sets places for serving). |
| Comparison of products with teacher's and grading by pupils according to quality of product. | Who have made puddings sufficiently good to serve at the luncheon? |
| See recipe above. | How may we vary this pudding for change sometimes? |
| . . . . . | Class serves, then washes dishes. |
| | If we serve this for the eighth grade luncheon we want it very good. How may we be more sure of making a good pudding? |
| Practice at home. | |
| Recipes distributed — family quantities. | |
| Summary | What points have you learned today that you will need to think about as you prepare your pudding at home? |

SUGGESTIONS FOR TEACHING A LESSON ON THE BATHING OF THE BABY

*Teacher's purposes in teaching this lesson:*

1. To develop ideals of helpfulness and service, especially to mother in the home, by showing children what they can do in preparing for the baby's bath and setting the room in order after the bath. This is to be done through a demonstration of the bathing of the baby.

2. To teach the essentials in bathing the baby for those children who may have to take charge of a smaller child at home (as is frequently the case in districts where the mother is engaged in some form of wage-earning occupation).

Time division:

40 minutes, opening discussion and demonstration.

30 minutes, summary by means of children's practice of important points, using a large doll.

5 minutes, pupils set room in order.

5 minutes, final summary and dismissal.

| *Subject Matter* (*in condensed outline form*). | *Method* (*in detail as lesson might be taught*). |
|---|---|
| | We have been studying about the French and Belgian war orphans this summer, particularly about Madeleine Jabot and Marie Antoinette. How old did we say they are? |
| Ages of Belgian and French orphans.<br>1. Madeleine and Marie, 12 and 14 years.<br>2. Others of all ages, from infants to 15 or 16 years. | Of what other ages do you suppose we would find children among these orphans? |
| Homes of orphans.<br>1. Convents.<br>2. Orphan homes, etc. | In what kinds of institutions do they live? |
| Older girls' duties for younger children.<br>1. Bathe and dress them.<br>2. Take them for walks. | What do you suppose the older girls like Madeleine and Marie have to do for the younger children? |

3. Amuse them.
4. Read to them or tell them stories.

**Knowledge necessary for bathing and dressing a baby.**

If Madeleine had to bathe and dress a little baby, what are some of the things she would need to know? Let us see if we can find out to-day.

1.[1] **Preparation of room.**

How shall the room be gotten ready?

Children read thermometer and arrange windows.

2. **Preparation of clothing.**

How can the clothing be most conveniently arranged?

NOTE. — This material to be developed through discussion between pupils and teacher, pupils showing their ideas of arrangement, corrected and amplified by teacher when necessary.

3. **Preparation of bathing articles.**

What shall we need to get ready for the bathing?

4. **Preparation of bath water.**

How shall we tell if the water is the right temperature?

. . . . . .

Children prepare bath water and test it.

**Undressing baby.**

1. Remove clothing over feet to prevent choking or smothering.
2. Remove as many as possible at one time to avoid too much handling.
3. Cover baby with towel to prevent chilling.

Now that everything is in readiness for the bath, we will undress the baby.

Who knows the best way of taking off baby's clothes?

Teacher shows as points are developed.

**Bathing baby.**

Teacher demonstrates, explaining reasons for each operation as performed.

[1] Details for these various headings will be found in *The Mothercraft Manual*. By Mary L. Reade; *Home and the Family*. By Kinne and Cooley; *Care of the Baby*. By Josephine Hemenway Kenyon, Teachers College Bulletin, No. 31.

Summary.

Important points developed in the lesson.

Illustrative material.

1. Large washable doll.
2. Clothing — one set on doll, complete fresh set to be put on after the bath.

. . . . . .

Ways of helping mother.

1. Prepare room and bath water.
2. Get all clothes and bath articles ready.
3. Put room in order after bath is over.
4. Bathe baby *only if* mother is willing.

Who can tell me what she has learned to-day about bathing and dressing the baby?

Who would like to be teacher and show us how much she has learned about undressing and dressing the baby, using this large doll?

Children practice undressing and dressing doll, telling reasons for each step as it is done.

How many of you have little baby brothers or sisters at home?

How could you help mother with the daily bathing of the baby?

Would you bathe the baby?

How many will help mother in these ways the next day she is at home at the bath hour?

Class dismissed.

## A Lesson on the Budget for Eighth Grade or Freshman Class of a High School

*Teacher's purposes in teaching this lesson:*

1. To make use of popular interest in the W. S. S. campaign at the school to create interest in account keeping and prepare the way for the subject of household budgets that is to come later in the term.
2. To teach methods of keeping accounts.

*Subject Matter (in condensed outline form).*

Reasons for poor showing of freshman class suggested by members.

Ways of earning:

1. Collecting newspapers and selling them.
2. Helping to take care of neighbors' children.
3. Running errands.
4. Making war breads, etc., and selling them.
5. Making preserves, etc.

Ways of sacrificing:

1. Making over old clothes or wearing clothes longer than usual.
2. Buying less candy and fewer sodas, etc.

Mary's first accounting.

| | | |
|---|---|---|
| | Received | |
| Sept. 5 | From Mother | $1.00 |
| | Spent | |
| Mon. | Tablet | $ .15 |
| | Pencil | .05 |
| Tues. | Carfare | .10 |
| Wed. | Soda | .15 |
| Th. | Candy | .25 |
| Fri. | Soda | .15 |
| Sat. | Movie | .15 |
| | Total | $1.00 |

*Method of Class Procedure (in detail as lesson might be conducted).*

Who saw the figures for the W. S. S. campaign on the bulletin board this morning?

Which class is ahead to-day?

I wonder why it is that this freshman class is so far behind the others?

Yesterday I heard Mary Donnelly say that she had never worked so hard before to make money, nor planned so carefully how it should be spent. Do any of you know of especially good ways in which the girls are earning extra money for W. S. S. at present?

Are there any special sacrifices the girls are making?

I asked Mary to tell us to-day how she planned for her savings, as I thought some of the other girls might like to know. Perhaps it might help you freshman girls to pull up your average.

(Mary explains her accountings, putting items on board.)

Criticisms from class.

1. Only ¼ for anything useful.
2. Too much for sweets and unnecessary things.
3. Nothing saved.
4. Everything for herself.

What are your criticisms in regard to such spending?

Mary's decision:

To plan at the beginning of the week for just what she would spend her money.

Will you tell what you decided, Mary?

Plans for allowances.

1. For something useful:
   *a.* Toward school supplies.
   *b.* Toward hair ribbons etc.
2. For carfare.
3. For Red Cross.
4. For W. S. S.
5. For recreation of some kind or for self.

If you had Mary's problem what are some of the things for which you would plan to spend your money?

Mary, will you put the general scheme for your budget and accounts on the board and explain it, please.

Illustrative material.

Mary's account book showing budget and accounts.

BUDGET, OR MONEY PLAN FOR THIS WEEK, MADE AT ITS BEGINNING[1]

| (1) I Expect to Receive | | | (2) Expect to Save | | | (3) Expect to Spend | | |
|---|---|---|---|---|---|---|---|---|
| On hand | | 10 | For W. S. S. | | | For school | | |
| From earnings | | | For | | | For carfare | | |
| From allowance | | | For | | | For war relief | | |
| From | | | | | | For recreation or self | | |
| Total | | | Total | | | Total | | |

[1] "Learning How to Save." Bulletin of the National War Savings Committee. See also, *Teaching the Budget to Children*. By Helen Goodspeed. "The Journal of Home Economics." November, 1918.

## ACCOUNTS OF MONEY ACTUALLY RECEIVED, SAVED, AND SPENT DURING THIS WEEK

| Balance on Hand | Am't Rec'd | Rec'd from | Am't Saved | Am't Spent | Spent for |
|---|---|---|---|---|---|
| 1st day $ | $ | | $ | $ | |
| 2d day | | | | | |
| 3d day | | | | | |
| 4th day | | | | | |
| 5th day | | | | | |
| 6th day | | | | | |
| 7th day | | | | | |
| Totals for week | | | | | |

Plan: a budget.

Budget, a plan for spending money.

Itemized statement: accounts.

Points to be remembered in accounting:

1. Plan ahead how money shall be used, planning for saving as well as spending; *i.e.* make budget.
2. Place budget on left page of account book.
3. On right hand page have

Does any one know of any name that is usually applied to such a plan for spending as Mary made out?

And what is the name applied to the itemized record of receipts and expenditure?

Does any one else in the class make budgets and keep accounts?

Will you put your plans on the board and explain them?

How many of you are willing to try budgeting your money and keeping accounts for a few weeks to see how it works out?

If you are to keep accounts what things must you remember?

detailed statement of expenditures and savings day by day.

4. Balance at end of week and check up with budget.

Advantages of planning.

1. Gives definite direction to spending.
2. Definitely plans for saving.
3. Teaches forethought and thrift.
4. Checks foolish and wasteful spending.

From our lesson to-day do you really see any advantages in making a plan for spending?

Newspaper discussion of budgets.

1. National budget.
2. City budget.
3. School budget.

Where have you seen the subject of budgets much discussed recently?

Suppose for our next meeting you bring in all the newspaper items you can find in regard to budgets and accounts.

Also bring your own account books and let us see how the account keeping is working out.

NOTE. — This lesson would be followed by several lessons on budgeting and accounts and lead to a consideration of the family budget and its division.

*A form of briefer plan.* — The following may be found suggestive as a type of briefer plan for the lesson on tapioca pudding. It should be accomplished by just as full and careful mental preparation as the previous plan, but it greatly reduces the time and labor of actual writing: —

*Project for the lesson:* To make tapioca custard pudding as a possible dessert for a coming luncheon.

*Purposes:*
1. To teach tapioca custard pudding as a means of reviewing starch and protein cookery and of teaching their combination in one dish.
2. To teach the children to apply knowledge already gained to a new situation through the development of the recipe for the pudding.

*Methods:*
1. Experiment: test tapioca with iodine for starch.
2. Demonstration: cutting and folding of egg whites into pudding.
3. Question and answer.

*Illustrative Material:* Dish of tapioca custard pudding.

*Questions:*
1. How shall we combine the materials for the pudding?
2. How does the method of cooking starch in the recipe compare with the method you have already learned for cooking starchy foods?
3. Why did we not add our egg to the tapioca and milk at the beginning of the cooking?
4. Why do we use only one third as much egg in this recipe for custard pudding as we did for the soft custard?
5. How may we be more sure of making a good pudding for our 8th grade luncheon?
6. What things have you learned to-day that will be helpful to you in your future food study?

*Assignments for home study:*

What is there in the manufacture of tapioca that makes unnecessary the long, hard cooking usually used for starchy foods?

References: Food Industries. By Vulté and Vanderbilt.
The World's Commercial Products. By Freeman and Chandler.
The Story of Foods. By Forrest Crissey.

*Time Division:*

9.00–9.05. Pupil's preparation — wash hands, put on caps and aprons.

9.05–10.00. Discussion and practical work.

9.20. Tapioca put on to cook.
9.40. Final preparation of pudding begun.
10.00–10.10. Serving pudding.
10.10–10.25. Dishwashing.
10.25–10.30. Summary and dismissal.

*How plan should be used.* — An objection, and a valid one, that is frequently raised against the writing of plans in any detail is that the teacher is so occupied trying to recall what she has put into the plan, or teach directly from the plan, that she forgets her class in the process and the lesson in consequence becomes formal and lacking in spontaneity and naturalness.

It is not expected that the full plan will be used during the lesson or that any attempt shall be made to memorize it, but that it shall be used as a tool before the lesson for organization and preparation and after the lesson as a means of checking up to see if all points have been made and the methods used have been well chosen, thus becoming a guide for future lessons.

As an aid during the lesson it is helpful to have the main guiding questions which have been thoughtfully prepared written out so that they may be referred to occasionally if needed, and for all lessons involving time-consuming processes, a time schedule as a guide to assure the completion of the process in the allotted period for the lesson.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Compare the suggested plans with the type of preparation you are accustomed to make. What essential elements enter into each?
2. Compare the suggested plans with others that you have seen. Which do you find most helpful?
3. Recall the aims of your last lesson. What evidence have you that they were accomplished?
4. How can thorough preparation for a lesson be made and at the same time retain naturalness and spontaneity?
5. How closely will you follow your plan in the actual conduct of your lesson?
6. Suppose the conditions demand a complete change of plan when you meet your class on a given morning, is the preparation you made wasted?

## REFERENCES FOR COLLATERAL READING

A Brief Course in the Teaching Process. Strayer.
Types of Teaching. Earhart.
How to Teach. Strayer and Norsworthy.
Planning the Lesson in the Preparation of Foods. Winchell. Teachers College Record, November, 1915.

# CHAPTER XI

## A STUDY OF BASIC ELEMENTS IN PLANNING THE INDIVIDUAL LESSON

I. The importance of careful foresight in planning lessons in Home Economics.
   A. Fundamental problems underlying the development of the individual lesson.
II. The planning of the lesson.
   A. "Form" *versus* "formality" in planning the lesson.
   B. Power of imagination in "living the lesson" before meeting the class.
   C. Writing the plan.
   D. The use of the plan.

**The importance of careful foresight in planning lessons in Home Economics.** — "And what do you plan to do at this point in your lesson?" asked the professor of pedagogy in his conference with the young normal student who was preparing for her first lesson as a practice teacher. "Oh! I shall depend on the spur of the moment," answered the girl. From the depth of his experience the professor answered, "But what if that moment has no spur?"

Every teacher remembers some occasion, when, for some reason or other not entirely prepared for her lesson, she has stood before her class feeling a mental dryness in the atmosphere, and vainly hoping for some leading remark or question which will stimulate discussion or arouse interest. But it doesn't come; there is no spur to the moment; and she suffers the mental distress of neglected preparation. If she is the right kind of a teacher, such an experience marks a turning point in the course of her progress; for it leads through its very discomfort to more careful preparation and adequate equipment for future lessons.

At all times, in order to make her teaching effective, she should know the home conditions of her pupils, their religious beliefs in relation to food, their approximate incomes, and the available food and textile commodities of the community. Without this intimate knowledge of conditions, and the will and the initiative to meet them, the " best laid plans " for presenting the work in home economics will be as ineffectual as the proverbial dog and his nocturnal baying.

Because of its relation to the sciences Home Economics is a subject which requires constant investigation on the part of the teacher in the preparation of her lessons. Her training should give her a knowledge of facts; but it should also train her ability to keep in touch with the progress of her subject, and it should inspire her with the desire to draw constantly from the most authentic sources of recent investigation. There is a humorous side to the tragic tale of the teacher who lost all her college notebooks in the briny deep, and decided that she must repeat her college course in order to recover the material. And there is indeed a pathetic side to the response of the young teacher two years old in the service, who, when asked if her college courses seemed adequate in preparation for her teaching, replied, "Indeed they did; I haven't had to look at a book since!"

*Fundamental problems underlying the development of the individual lesson.* — As one gains experience in teaching Home Economics the mechanical details of lesson planning become less necessary for the simple reason tha habits of cleanliness, system, economy of time, the distribution of tools and materials, and general laboratory management have been established through the " trial and success " process. However, it is very important that the beginning teacher plan specifically beforehand for all those details in every lesson, in order that her time and attention during the class period may be turned to the best account in presenting the lesson to the class; and, also, in order that the right ideals and habits of work may be established early in her career as a teacher; and in the methods of work of the girls in her classes. The teacher who fails to establish in the early weeks of her experience subconscious ideals in relation to

details, will continue to be harassed by noisy utensils, untidy towel racks, disorderly supply closets, sewing boxes, and pantries, to the end of her unhappy teaching days.

In relation to classroom order, the modern idea of socialised education necessitates greater freedom than did the schools of long ago; but the teacher who would succeed to-day must establish ideals of class management which will provide for the degree of freedom of expression and activity which incurs no loss to the progress of her work. Freedom should not result in license; nor should intelligent activity be mistaken for disorder.

Establish ideals of management, a system of careful laboratory management, including the arrangement of supplies, dish-washing, and desk inspection in the teaching of foods, and the storage of sewing equipment, materials, patterns, etc., in the teaching of textiles and clothing; and with this background the planning of the lesson in Home Economics resolves itself into:

(1) a consideration of the class to be taught, involving a study of individuals, their problems and their responsibility to community and world interests.

(2) the selection of subject matter and practical work best adapted to the solution of those problems.

(3) the choice of methods by which individual members of the class can be led to solve these problems with the greatest interest and increase in the consciousness of personal power and achievement.

It is obvious that every teacher must face these problems in planning her lessons, whether she is working under a supervisor and a prescribed course of study, or is developing a series of lessons of her own choice. The same lesson may be presented to meet the needs either of a high school girl living in an apartment hotel, or of a young woman living with her husband and six children in a humble cottage, which remains an industrial center in spite of modern tendencies.

Modern education demands a constant selective process. The former "readymade" course of study no longer fills the requirements. Therefore the individual lesson in any up-to-date course of study must show adaptation to the peculiar conditions of the

class to whom it is to be presented, and perhaps in no subject is intelligent and sane selection more essential than in Home Economics. In order to be of value the subject must be adapted to the home conditions and the needs of the student, and the American home is indeed a variable quantity. "But," some one may say, "are we not striving for an approximate uniformity in ideals and processes?" Perhaps we are; but we must begin where we find these homes, and present appropriate building material from lesson to lesson.

The present great movement for democratization expands the horizon of the home economics teacher. "Americanization" should mean not the remolding of all ideals and methods of work in home-making after some foreordained pattern, but the assembling of that which is best and most successful in the methods of work employed by the various home-makers in our land, whether they be those of

"Little Indian, Sioux or Crow,
Little frosty Esquimaux,
Little Turk or Japanee,"

or of any of our neighbors who flock to our shores. To be sure there must be a uniform framework for the building of the structure, and the building material must, because of market conditions, be similar in nature; but the teacher of Home Economics who is eager to become a real power, will welcome whatever opportunity may come to her to win the sympathy of her pupils and their parents, and to promote their well-being by adapting her teaching to their religious beliefs and their methods of home-making, in so far as she is able to incorporate them in the improvement of home conditions.

How, then, shall the teacher proceed in planning the individual lesson in Home Economics? A brief statement of the underlying problems which she faces may be of value.

1. What are my reasons for teaching this lesson to this class of girls?
   (1) What is the fundamental *problem* to the solution of which this lesson is contributing? What are the subproblems?

2. What is the relation of this lesson to the series of which it forms a part?
3. How can I use the allotted time most efficiently and economically?
4. What material must I introduce into this lesson
   (1) in order that it may be most valuable to the student at this point in her experience? in the solution of her problem?
   (2) in order to make it most applicable to her home and social responsibilities?
5. How can I teach this lesson
   (1) to make it most effective at this point in the series?
   (2) to make the student best able and most eager to utilize the principles taught?
   (3) to secure a legitimate degree of skill at this point in the girl's training?
6. What illustrative material can I introduce which will help to illumine and "fix" facts, and stimulate further study on the part of pupils?
7. What connections existing between this lesson and the present world interests should be linked up in order to strengthen the international interest of the girls?

With these main problems before her the teacher will plan a lesson which will stand the test of educational criticism because she has as her primary focus *the girl and her interests and development* rather than the logical development of a subject, except in so far as that logical development coincides with psychological procedure.

**The planning of the lesson.** — *"Form" versus "formality" in planning the lesson.* — With her characteristic facility of expression Miss Helen Kinne was accustomed to liken "form" and "formality" in lesson planning to the difference between the form of the graceful elm and the formality of the austere poplar. The lesson which is formless lacks focus and objective; but the lesson which is formal lacks the spontaneity and versatility which signify life and growth, kindle the imagination, and stimulate independent thought and action.

In accordance with modern methods and theories in education the lesson must contribute toward the solution of a problem which is fundamentally within the grasp of the child, and which, whenever possible, should grow out of a conscious need in the mind of the child. It is the experience of all, no doubt, that a lesson assign-

ment which is given "out of the clear sky" offers far less attraction than an assignment which has been suggested as illuminating some puzzling point or problem which has been under discussion.

The task is not easy, therefore, for the teacher who conscientiously strives to plan her lesson so that it may have form, *e.g.* a definite objective and a well-ordered scheme for attaining it, and still give full consideration to the interests and possible new problems which will be projected by the pupils. Perhaps her foremost characteristics must be versatility and a willingness to experiment — to create a workable plan which will give *form* to her lesson, and subsequently to remold her schemes in order to utilize the pertinent "leads" of the class.

"Form *versus* formality"; versatility *versus* woodenness; the skill of the artist *versus* the business of the artisan — which shall be exemplified in our teaching?

It is obvious that for no two classes will the same lesson plan suffice in every detail. The same elements may be essential in the lesson, but the relationship to home experience and the interests of the girls will of necessity vary. It is interesting to note to what extent "fashions" change in lessons as in hats! The method of attack which was successful at the time it was employed will doubtless seem decidedly uninteresting when considered for another lesson by the same teacher or by another teacher who has recognized it as skillful in the hands of a teacher whom she has observed.

*Power of imagination in "living the lesson" before meeting the class.* — In the teaching of Home Economics imaginative foresight is an absolute essential. The teacher who will plan her lesson most effectively in relation to economy of time and effort in the handling of supplies and the planning for practical work must determine her best method of procedure, by "living the lesson" mentally before she meets her class. Will Mary reach the point where she will need the yarn for the wristlets? Will samples of the various kinds of wheat substitutes make the lesson more effective? Will it be wise to "round out" the discussion of salads before preparing the salad dressing? What devices, materials, and practical work will make the sanitation lesson most valuable and interesting to these girls

who come from homes that are in large part their responsibility so far as cleanliness is concerned? How can I plan the personal hygiene lesson so that "Little Orphant Annie" and Topsy and Miss Alcott's Amy March may all be inspired through it to a greater responsibility for their own as well as their families' welfare?

It is only by means of these mental excursions through the lessons to be taught that an intelligent plan for the economical use of time and the wise selection of subject matter can be effected. To experience only once the chaos resulting from the failure to "live the lesson" beforehand is sufficient to convince the young teacher that the time is well invested.

*Writing the plan.* — The writing of the lesson plan is a very profitable step in the preparation for the lesson. It serves as a practical means for finally determining the response to the fundamental problems which have been cited earlier in this chapter as facing the teacher when she begins to plan. As has been stated in the preceding chapter, the working plan of the teacher will vary in length with her own methods of work; but it is urged that it be reduced to its elements so far as its written form is concerned in order to stress the essential points and eliminate non-essentials. Unless the formulation of the plan can become more than the writing of an abstract, it will be a burden; it will represent a lifeless theme, not the actual intercourse of human minds which it should represent.

There are certain main divisions in the lesson plan:

1. The *statement of aim* for teaching the lesson. This should be a very clear and brief statement of the goal to be reached during the lesson period.
2. A brief statement of the subject matter which should be taught in relation to the problem which underlies the lesson.
3. The statement parallel to the subject matter to be presented of the *method* by which the points are to be taught. The *method* column should include a statement of a few leading *questions* which will be asked during the lesson in developing the essential facts.
4. The *"time table"* giving the general time divisions of the lesson period. (These periods should be as few as possible in order to avoid confusion in the mind of the teacher.)

In the development of the lesson plan, the teacher must consider in detail the fundamental problems already stated under I A in the first part of the chapter. Although every lesson is a study by itself, some fundamental framework is helpful as a basis for consideration.

1. Statement of aims. Reasons for teaching this particular lesson. — In the average teacher's work there is greater risk in too many than in too few aims. Over-ambition tends to dissipation of energy and lack of thoroughness. Concentrated effort well focused on two or three leading goals will make for stronger results in thought content and in practical work. Decide upon those aims which you consider essential to the solution of the problems in hand and bend your efforts toward accomplishing them. Formulate secondary aims which you consider important, and the " incidental teaching " in the lesson period will substantiate them.

Every lesson in Home Economics will offer to the conscientious teacher opportunities for strengthening both habits of cleanliness and system in work. These aims belong to that subconscious equipment which forms the background for the planning of the lesson; but unless they are occasionally brought to the surface there is danger of retrogression.

Two or three leading aims or purposes in the lesson may serve as a measuring stick for evaluating the material selected for presentation. Furthermore, these aims may be altered to meet the problems presented by the class, providing they prove more interesting and vital than the preconceived aims.

Many lessons in Home Economics involve a *practical* aim; for example, in a series of lessons taught during the war and designed to solve the problem, " What share can I take in helping to solve some of my country's problems this summer?" one lesson may have as the specific children's aim, "In order to help mother with her Red Cross work I must know how to hem nicely"; and the practical work may be the hemming of towels. In the same lesson other aims may be: to teach the choice of the best material for various kinds of towels; to teach which material is most patriotic to be used for toweling; to teach ways of conserv-

ing textiles by utilizing flour bags and other materials for toweling; "What Red Cross garments will I be able to make when I know how to hem well?"

The skill and wisdom of the teacher will lie in so selecting and evaluating the aims that the proper emphasis may be laid upon the primary aims, and the secondary aims be kept in their proper relationship.

In a series of lessons on meat substitute dishes, the practical work in one lesson may be the making of corn à la Southern.[1] The pupil's practical aim may be "the attractive service of left-over corn as a main luncheon dish"; while to review the cookery of starch will indicate the fact that the teacher has the connecting link in mind and will recall to the pupils essentials from their past experience. "To show that there are food materials, egg and milk, which cannot be cooked under the same conditions as starch" will indicate the introduction of a new field of study. "To discover why corn à la Southern may be wisely used as a meat substitute at luncheon or dinner" suggests a study of food values. "To compare the cost of corn à la Southern with lamb chops or beefsteak" suggests the economy phase. "Why is it more patriotic to serve this dish occasionally to my family than to serve beefsteak?" introduces the subject of food conservation and the responsibility of the individual in supporting the food administration.

"But there is no time in the short lesson period to carry out all these aims!" Of course there is not time — these are suggested merely as a possible basis for selection to show that the trend of the lesson may be scientific, dietetic, or economic, as well as practical. What problems will Mary and Jane and Barbara bring with them to be solved? This will depend upon their home conditions and their resulting primary interest in the course in foods. Here the skill of the teacher will enter in, for in addition to the fundamental problem which should be common to all, she will awaken an interest beyond the simple preparation and serving of foods. However, whether the student's dominant aim be practical, economic, dietetic, æsthetic, gastronomic, or patriotic the balance may be kept by the

[1] *Boston Cooking School Cook Book.* By Fannie M. Farmer, p. 291.

instructor through the series of lessons by the tactful introduction of aims of varying character as the series progresses. This entails careful consideration, not only of the needs of pupils, but, especially during the present conditions, of the pertinent material to be carried into the homes which will promote the best interests of democracy.

2. Relation to series. — In a carefully developed course of study there is unity and sequence, and each lesson bears a definite relation to lessons past and lessons to come, in addition to the relationship to the problem in hand. There should be "hooks and eyes" connecting this lesson with the last and the following. To the teacher who organizes her own course of study, these connecting links are naturally very evident, and she deliberately stresses them. In the case of the teacher who works under a prescribed course of study, it is necessary that she fully appreciate and appropriate the aims and details of the supervisor in order to establish the essential unity.

What problem was left with the class at the close of the last lesson which created a need for the new one? What problem will be left with the class as a basis for the next lesson? Unless the connecting links be made conspicuous, the lesson in Home Economics tends to stand as an isolated unit demonstrating the practical process, but failing to utilize this process as a vehicle for establishing a principle or launching a new project. To illustrate, in the problem, "The well-groomed girl stands a better chance of getting along in this world, and is better able to serve her country, than the girl who is careless in her appearance. What can I learn about the care of my body which will help me to keep fit?" the lesson on personal hygiene may stand as an independent unit, or it may relate to the previous series of lessons on the sanitation of home and community, and may pave the way for a series of lessons on hygiene of clothing.

Simple though the connections may be, they are essential in planning a lesson in Home Economics; and the lesson which fails to present these fundamentals is ineffectual in building the structure of which it should form a part.

3. Division of time. — The economical use of the lesson period

should be carefully planned by the teacher of Home Economics. Samuel Chester Parker[1] holds the teacher responsible for the establishment of principles of business management in classroom direction. He says in part:

> The school is a complicated, specialized institution maintained by society to achieve certain specific results. The classroom activities should be planned carefully to make sure that they are directed toward securing these results most economically and effectively, and the possibilities of misdirected time, effort, and energy should be reduced to a minimum. . . .
>
> In any other institution or organization or plant which is as complicated as the school, efficiency depends to a large extent upon careful attention to the details of management. . . . A manufacturer may enormously increase the efficiency of his plant by inventing a device that will require fewer operations to produce an article, or will produce several articles by the same number of operations as formerly produced one. If such principles of economy are important in factories, where the product that is wasted or economized is material, they are much more important in the school, where the product to be wasted or economized consists of human lives. No factory deals with such precious raw material as does the school; hence in no other process is it so important to give careful attention to the problems of waste and economy as in education.

In the next chapter specific suggestions will be offered for devices for economizing time in the teaching of Home Economics. The present consideration will deal only with the importance of carefully planning for the expenditure of the allotted time.

To some it may seem necessary to determine the time schedule before defining the aims of the lesson; but "where there's a will there's a way," and the skillful teacher will find the way to accomplish her aims if they seem vital to her, and will plan her lesson period accordingly. Ideally, the separation of laboratory and discussion periods is highly desirable, bringing forward during the laboratory period only the fundamental points which the laboratory work has been planned to illustrate. Practically this plan has not been accomplished in many school programs, but it is a goal toward which teachers should strive.

In the food preparation lessons, it is wise for the teacher in the average lesson of 90 minutes to set aside at least 20 minutes for

[1] *Methods of Teaching in High Schools.* By Samuel C. Parker.

the actual housekeeping processes, — dishwashing, towel washing, arrangement of utensils, storage of supplies, inspection, etc. In the sewing lesson, time must be planned for the handling of equipment, both at the beginning and the end of the lesson. The time necessary for the handling of materials and equipment in the other types of lessons must be carefully considered by the teacher as she " lives the lesson " before meeting her class.

Whenever materials and utensils can be arranged, or processes accomplished before the arrival of the class, which will economize the time of the class *with no loss of educational value to them*, the careful teacher will make provision for the saving. For example, water may be boiling in preparation for the cooking of cereals which is in itself a long process; the necessary equipment and samples may be distributed for textile or food tests; charts may be hung; blackboard work may be prepared (on a reversible board, if desired); cleaning equipment should be in readiness.

The allotment of the remaining time will vary with the individual teacher, and with the practical work to be accomplished. It may be taken as a fundamental principle that if a practical process is undertaken it must be accomplished in its full significance, and not suffer from a delimited time. For example, the cereal lesson already cited, and the cooking of the tougher cuts of meat, must in order to be effective be given full time, and unless this can be done in the lesson period provided, the process must be arranged in such a way that it may be started by one class and completed by another, and the other part of the process demonstrated to the class or carried out by the class at another time. Whichever plan is determined upon, the complete cycle must be clear in order to avoid the misconception of the child who informed her mother that she had " baked bread to-day that had been left rising last week."

In the food lessons, if the dish prepared is to be served during the class period, time must be planned for proper service. The school luncheon furnishes, in many schools to-day, the opportunity for the utilization of products, but even in this event time must be saved for tasting and comparing results. As a means of food conservation the coöperation with the school luncheon is most

desirable; furthermore, the plan offers opportunity for the use of family size, rather than the individual, recipes; and, when rightly used, provides excellent opportunity for educating the school public in the wise use of foodstuffs.

One of the foremost advantages in coöperating with the school lunch room is the standard set for food products. The enthusiasm for preparing products which are salable results in improved methods of work and in a keen appreciation of high standards in food preparation.

In the lessons in sewing and other phases of Home Economics the teacher is freer to divide her period between discussion and practical work, and of course she will weigh carefully the material which should be presented in relation to the project in hand. The wise time for the presentation of the new processes, and the most economical and lucid method of presenting it is a matter for careful consideration in relation to every lesson taught.

Whenever possible, discussion periods should be unbroken. There are lessons in which the practical work is so absorbing that to introduce material for discussion is impractical, in which case a brief time is essential at the beginning of the lesson to present an intelligent basis for work. On the other hand, unless there are separate discussion periods, it is sometimes wise to present a lesson with little or no practical work in order to take time to present new principles, or to clinch principles which have been under discussion.

Perhaps most important of all in the division of time is an allowance sufficient for careful, thoughtful, skillful work on the part of the pupils in the handling of materials, at the same time providing training in economic planning of work and speed in accomplishing results. Nothing gives more assurance and poise to the teacher than a carefully developed time schedule for the wise use of her lesson period.

4. Selection of subject matter. — The thought content of the lesson naturally grows out of the needs of the problem to be solved, the aims to be accomplished. There is a certain amount of subject matter which may be wisely presented to all classes, but the needs of the varying types of classes demand careful weighing of values

in determining what subject matter must be presented at this particular stage of the student's experience. In teaching a lesson to young society women on the use of cheese, the subject of various fancy imported cheeses is well chosen. To a class of hard-working mothers or their daughters, the various uses of American cheese is a wise selection of subject matter. To both, an understanding of the food value of cheese as a basis for its wise use in promoting the conservation of meat is essential. The economic phase of the use of cheese means less to the first class than to the group of students whose families must make a dollar stretch as far as it will.

It is impossible to plan the subject matter for each lesson as a unit. There must be a wise division of material, carefully developed, among the various lessons. For example, in a series of lessons on textile conservation, various phases of the subject will doubtless be presented:

Problem: How can we help in the thrift campaign by wise planning in relation to clothing and household linens?

(*a*) Present-day uses of various textile fibers.
(*b*) Ways in which they have been used in times past.
(*c*) Effect of war upon production of textile fibers.
(*d*) Patriotism in relation to purchase, making, and care of clothing.
(*e*) Patriotic use of time and money saved through clothing conservation.
(*f*) Making of "conservation garments."
(*g*) Renovation of hats, dresses, underwear.
(*h*) Repair of clothing — shoes, hose, gloves.
(*i*) Economy in use of household linens.
(*j*) Renovation and repair of same.

To treat all these in the first lesson would result in confusion. In planning for the series, the teacher will decide which phases of the subject should come first as a basis for intelligent working out of principles; she will leave until later lessons those topics which will round out the subject. In some communities, the need for thrift in clothing purchase must be stressed at the outset. In others thrift in clothing has been foremost at all times because of necessity; skillful methods of care and repair have been in practice; and in this case stress may be laid upon the present-day extra demands

upon the textile output and appreciation of the past efforts with stimulation for present continuance may be the attack.

In planning for the practical work in a lesson in Home Economics it is highly essential to provide home conditions so far as possible. Ideally, each girl should experience so far as possible her home conditions as to amount of material used, equipment, environment, etc. The many opportunities for the making of garments and supplies are invaluable for promoting the idea of coöperation with homes and community; and the school lunch room and food sale prove a boon in that they provide opportunity to handle large quantities for more normal experience.

There is no high road to success in the selection of subject matter; but a few definite suggestions may be helpful:

(*a*) The subject matter should be chosen which will contribute toward the solution of the problem in hand.

(*b*) It should be accurate, up-to-the-minute, and presented in unmistakable terminology.

(*c*) It should be developed psychologically as well as logically.

(*d*) It should be built upon the past experience of the students, and should open up new fields of interest.

(*e*) The practical work in the lesson should illustrate the principles taught in the lesson.

(*f*) It should contribute to the solution of the problem of the series and the individual lesson, in order to accomplish strength, unity, and thoroughness.

5. Ways and means of presenting subject matter. — Education as a "pouring in" process has become a matter of historical curiosity. The assignment of lessons in terms of pages, or "the next 25 problems" has been relegated to the annals of the development of educational method. The teacher who is in line with present-day teaching ideals finds in her choice of methods one of the chief sources of interest in her profession. The reason for this is clear. The development of creative and motive power in the minds of her pupils is her chief objective. To guide her class in the formulation of a worthwhile problem, and in the process of solving that problem through the application of previously discussed principles,

or the discovery of new ones, presents to her a task which calls into activity her own knowledge of psychology and pedagogy as well as her interest in human nature.

It is a task of dealing with mind and spirit, and not one of concrete facts. It is the response of her pupils to her suggestions which renews her interest in her work each succeeding year.

The teacher of Home Economics who would gain rather than lose enthusiasm for her work must retain her interest in teaching as a field for experimentation. A method which proves successful with one group of girls in the hands of one teacher may prove most unsuccessful under other circumstances. An attack which is well planned and executed by a teacher one day may be lifeless and limp if tried a second time. A card catalogue of "successful lesson openings," as suggested by one young woman as a valuable record for future use, might be interesting as a record of various ways in which it had been done; but would doubtless prove to be as ineffectual, if not actually as deadly, as the average patent medicine.

The teaching process in Home Economics, as in all other subjects, is necessarily a closely woven fabric of many different methods. They may be briefly listed as: (1) telling, (2) showing, (3) question and answer, or development, (4) text-book, (5) experimentation, (6) drill. In determining the best methods to employ in teaching various points in a lesson a few main questions may be asked:

(1) Which methods will render the pupils most thoughtfully independent at home, in the application of the principles taught?

(2) Which methods will make for the greatest economy of time without sacrifice of initiative and experience on the part of the pupils?

(3) To what extent can this lesson serve as a strong factor in developing the reasoning power of the students?

(4) Which methods will enable the pupils to become most independent in the formulation and solution of other problems, similar in nature to this?

(5) Which methods will serve to encourage the right attitude toward the accomplishment of the project?

In teaching the skillful teacher will be very sure that her pupils are clear as to the problem before them, for only by having a clearly defined goal can they appreciate the subject matter, and properly evaluate it.

With the excellent text-books at present on the market it is highly desirable that the household arts work be dignified by their use. A carefully chosen text supplemented by reference readings will add much to the educational status of the subject and is essential to progressive teaching. The use of the printed page as a source of material helpfulness in the solution of the problem in hand, its perusal a *means* and not an *end*, must be carefully planned for by the teacher. The author of the modern text-book in Home Economics does not pretend to determine the best sequence of subjects for the use of intelligent teachers. This she leaves to the wise judgment of the teacher in meeting the needs of her particular class. However, for the teacher with little training and experience there are text-books available which offer a suggestive sequence of lessons; and the best modern text-books also suggest methods of handling the various lessons — questions, experiments, problems, etc.

One of the most valuable steps in planning the lesson is the careful wording of the *main questions* which serve to develop the lesson material. Even though the question as finally presented may not closely resemble the original, because of the distractions of the lesson and the unexpected responses of the pupils, nevertheless, it is stronger because there was an original. If the teacher keeps in mind the general trend, with her questions as stepping-stones, she may throw aside formality, and thus "personalize" her lesson.

The questions as planned in a lesson will take on different characteristics, depending upon their purpose. To illustrate, there will be questions which are designed to review principles already established: "How may a painted surface be washed so as to retain its luster?" "How may a woolen sweater be washed so as to avoid shrinking?" "What is the proportion of liquid to flour in making a pour batter? a drop batter? a soft dough?"

"What is the general apportionment of the income in the working out of the budget?"

It will be readily seen that these questions demand more memory than reasoning power. They play a vital part in all teaching, and should be carefully planned for. However, care must be taken that not all questions provide merely for review. Much of the most effective teaching is accomplished by the carefully worded question which draws upon previous knowledge, in the solution of a new problem.

Following the series of lessons in personal and home hygiene in which the duty of health had been emphasized, the following question would demand a search of principles established in order to evaluate them in terms of the new need: "What demands might Uncle Sam conscientiously make of his kitchen soldiers as a means of promoting and maintaining the efficiency of his citizens?"

Miss Romiett Stevens has called this type of question a "thought-projecting question." Dr. McMurry mentions the review and the new view as indicative of the two types of questions discussed.

The occasional summary as a means of checking up must also be carefully planned. It serves as a means of clarifying and organizing material; of designating essential facts and processes; and, to the teacher, it serves as a means of testing her own teaching method. Originality in summary questions is to be courted. The stereotyped question becomes irksome to the teacher as well as to the pupil.

6. Illustrative material. — In the selection and use of illustrative material lies one great proof of a teacher's strength or weakness. An otherwise successful lesson may be marred by the introduction of irrelevant material which dissipates rather than concentrates attention; but the omission of a really valuable bit of illustrative material may mean just the lack of emphasis which is needed in elucidating a difficult point. Furthermore, excellent illustrative material may prove valueless in the hands of a teacher who fails to introduce it at the crucial point or who presents it without making its connection strong. Therefore in planning for the use of such material it is wise (1) to select only that which will enrich and

strengthen the lesson, (2) to produce it at a time when it will best perform its mission, (3) to handle it clearly.

Is it not natural to feel a keener interest in charts, tables, and diagrams after their use in solving a problem or demonstrating a fact? They may have a certain value as constant wall decorations but they are of greater value if their meaning is interpreted on their first appearance.

Opportunity for collecting available material valuable in the teaching of Home Economics may serve as a constant class exercise. No subject offers a more extensive field, and the wide awake teacher will inspire her classes to add intelligently to the supply. A bulletin board is of untold value as a medium for the introduction of material which the class may collect, while an occasional period for discussion will help as a means of evaluating and determining authenticity.

As another form of illustrative material, emphasis should be laid upon the value of seeing things "at first hand." Every opportunity for visiting factory, shop, bakery, market, exhibit, and museum should be seized. In order to make it of the greatest value, a clear idea of what is to be seen should be presented before the visit is made, and a discussion with reports perhaps before the school assembly, should follow. This offers a very excellent opportunity for coöperation with the English department, and the teacher of Home Economics herself will find in such phases of her work constant occasion to strengthen the expression, both oral and written, of her classes.

7. Relation to outside interests. — At this time in the history of the world when the life problems of the individual are so closely knit with the events of the world, it is useless to stress the importance of utilizing these interests, because of their universal discussion.

Perhaps no other stimulus could so successfully have emphasized the importance of relating all home economics teaching to social and economic conditions as did the world war. Even in times of peace, current history teems with interesting events which are closely related to foods, clothing, and shelter. The mere mention

of such events, with or without comment, will enrich the lesson and broaden its content. Through the occasional discussion of advertisements, clippings, newspaper articles, and other references, the class will gain in the direction of research, judgment of values, and evaluation of statements.

Of great importance to the field of Home Economics is all legislation dealing with food, child labor, market inspection, food inspection, manufacture and adulteration, food and clothing conservation, the work of state experiment stations, recent scientific discoveries, the work of the Consumers' League, etc. Through the introduction at the wise moment of reference to these interests, they will lend much to the strength of the lesson fiber and serve as a valuable basis for the establishment of the right attitude of mind toward all legislation so closely linked with the lives of men and women.

*The use of the plan.* — It was Colonel Parker who expressed a lack of respect both for the teacher who went before her class unprepared for the details of her lesson, and for the teacher who carried out her plan exactly as she had made it before class. A lesson without spontaneity is dead indeed; but a lesson which fails to evidence careful thought and preparation as a basis for spontaneity is in danger of never drawing the breath of life.

Much must enter into the home economics lesson that cannot be deliberately planned. There is the subtle influence toward the best in womankind and her ideals in life. There is the development of worthwhile interests in the girl, which will lead into well-placed philanthropy in the woman. There is the perspective and vision of woman's work in the world, of her rights, privileges, and responsibilities.

Even though the lesson be one on the preparation of a simple food, or the making of a garment for a little Belgian baby, or the designing of the girl's bedroom, it may be permeated by that subtle something which will lift it out of the realm of the simply physical into one of greater value to both student and teacher in the deepest educational sense.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Develop a bibliography of twenty-five books which you would like to have as a part of the school library which you might use for reference work in assigning lessons in Home Economics.
2. What procedure would you suggest for becoming acquainted with the home conditions, religious beliefs, etc., of the girls in your classes?
3. What forms of social service can you suggest which might be introduced into the teaching of Home Economics in your community?
4. Suggest some problems which you believe would be of actual interest to the girls of an eighth grade class.
5. Describe a lesson in laundering as you would present it to two different groups of girls.
6. Write a brief plan of a lesson observed.
7. Write a plan of a lesson to be observed, and discuss later in relation to the lesson as taught.
8. Write five questions which by their responses would give the body of subject matter which you would hope to develop in a lesson on the care of the baby in a senior high school class.
9. "Live through" a lesson in any chosen field in Home Economics, indicating the method you would use in teaching the essential points.
10. Illustrate the difference between the logical and the psychological development of a lesson, by developing the essential facts of subject matter in a lesson on flapjacks to be given to a boys' class in camp cookery.
11. Write a series of five review questions; translate them into "thought-projecting" questions.

## REFERENCES FOR COLLATERAL READING

Types of Teaching. Earhart.
A Brief Course in the Teaching Process. Strayer.
How to Teach. Strayer and Norsworthy.
The Question as a Measure of Efficiency in Instruction. Stevens. Teachers College, Columbia University.
The Learning Process. Colvin.
How to Study. McMurry.
Method of the Recitation. McMurry.
How We Think. Dewey.
Methods of Teaching in High School. Parker.

## CHAPTER XII

### MANAGEMENT PROBLEMS

I. Good management a phase of good teaching.
II. Factors that contribute to classroom efficiency.
III. Administrative problems of the department.

**Good management a phase of good teaching.** — In observing classroom instruction and judging its value we are so continually reminded to keep our eyes on the pupil, to study his motives, to watch his reactions, to measure his mental growth, that we frequently fail to observe and to analyze the factors that are responsible for his achievements or lack of them.

Efficiency on the part of the class is not due to mere chance but is the result of the favorable physical and mental conditions under which the class works. These are in large measure under the control of the teacher, and the inexperienced teacher, especially, needs to study how to create them and how to control them. Good management in the classroom is an absolutely essential part of good teaching, and one should beware of the teacher who says she can teach but cannot manage her class. The teacher who is an artist in her work is indeed a skillful manager. It may be that the work of the class runs so smoothly that the casual observer sees no evidence of conscious effort on the part of the teacher. This is as it should be, for much of the best work of the teacher with her class is done before the class period. She will have arranged for the physical comfort and social management of the group quite as adequately as for their intellectual instruction. She will have anticipated all of the possible emergencies and will have made some provision whereby they may be adequately met by the pupils.

**Factors that contribute to classroom efficiency.** — ***The teacher's knowledge of her pupils.*** — No element contributes so much to

successful classroom management and the consequent efficiency of the pupils as the teacher's understanding of and sympathy with her pupils. She may know her subject thoroughly and may have at her finger tips all theories in regard to educational practice, but unless she knows human nature and feels a genuine interest in the individual members of her class she will have nothing to help her in determining her mode of procedure. Human nature is very diverse and it is difficult to tell any one how to deal with a particular situation, but every teacher should make a study of the age of pupil she expects to teach and should apply her knowledge of psychology as well as of physiology in the schoolroom. It is necessary that every home economics teacher of upper elementary and high school classes study the psychology of the adolescent girl in order to understand her moods, her interests, her ambitions, and her ideals. She will never be able to help a girl unless she knows what motivates her actions. It is easy for teachers to forget their own experiences, or to fail to utilize them in dealing with others, and so it is quite essential that they make a study of the type of pupil they intend to teach.

The physical and mental changes which girls of this age are undergoing should be kept in mind. The lack of poise and self-control which so often manifest themselves in inattention and indifference to serious work and the other characteristics that frequently annoy teachers, should be diagnosed properly and treated with serious consideration.

A teacher will never be able to "manage" a classroom if she attempts to deal with situations without understanding the factors which enter in.

*The physical condition of the pupil.* — The departmental teacher, or teacher of a special subject, who meets her classes only at infrequent intervals has the disadvantage of not becoming acquainted with the individual pupils of the group as does a regular class teacher, and unless her attention is called to it, does not always give as much thought to the physical condition as she should. The relation of health to good work is very close and every teacher should make a point of knowing all she can of the health of every

girl under her instruction. Most of them will be normal, so this is not expecting too much of any teacher. She should early discover those who have defective hearing or vision and should seat them where they can work to best advantage. The left-handed girl frequently needs individual attention in the sewing class, and special provision must be made for the short girls who cannot reach laboratory equipment with ease. One laboratory in which girls of uneven sizes worked was provided with small boxes for the little girls to stand upon while attending to their cooking processes; footstools were used in the sewing room. Occasionally a pupil or a class is physically tired and finds it impossible to accomplish good work. One wise teacher finding the majority of her class unresponsive one day took the entire class into the spring sunshine for twenty minutes. The change, the rest, the novelty, and the surprise quite refreshed them and they returned to the classroom for a satisfactory hour's work.

In nearly all of the home economics classes there is enough variety and activity to prevent mental or physical fatigue, but occasionally a teacher needs to have her attention called to the necessity of introducing it. To illustrate, girls just learning to use the sewing machine go at it quite vigorously and are eager to continue for an indefinite time. Muscles unaccustomed to treadling become presently lame. The teacher should anticipate this and alternate the machine practice with some other kind of work. To require too fine handwork from pupils whose muscles of eye and hand are not adapted to it further illustrates the point.

The health of the adolescent girl should be kept in mind, and when necessity requires it she should be excused from class work.

*The mental attitude of the class.* — Keeping up the morale of the class or maintaining the right mental attitude of the class toward their work is one of the most interesting phases of classroom management. It requires keen perception, discerning judgment, and great tact to keep twenty to twenty-five girls in the mood to want to do good work all of the time, and the successful teacher has to be very versatile to accomplish this end.

In the first place, in order to get good work it is necessary that

the work being done have value in the eyes of those doing it. In other words, a motive strong enough to establish momentum must be provided. In watching the work of many sewing classes, without exception, better work is done by the girls when working on garments for Belgian refugees than when working on garments for themselves. The idea of doing valuable and necessary work stimulates even incompetent girls to do better work than usual.

Preparing a meal for the teachers and principal, even though simple, causes more eagerness and excitement with corresponding greater effort to do it well than the usual cooking lesson. Even the extra cleaning and scouring before serving this meal seem very much worth while. Special occasions cannot motivate all lessons, but the wise teacher will utilize every available means of making every lesson appear valuable to the pupils.

The teacher's attitude toward the work in hand is invariably reflected by the class. Her interest and enthusiasm is contagious and girls are quick to respond. Personal interest in the girl evidenced in some social way is always an incentive to do good work and every teacher should utilize this means in an honest, sincere way.

It is quite essential in maintaining the desired mental attitude to keep the girls from becoming discouraged. Discouragement is a destroying influence and inhibits one from doing good work. A pupil who is allowed to go ahead with a piece of work only to find later that it is wrong and needs to be ripped will be discouraged, and she will feel that the teacher is in large measure to blame. A hint, a suggestion, or question might have prevented the disaster and preserved the right attitude of mind in the pupil toward her work. A pupil's failures may help her to grow, but she should not be permitted to have many of sufficient magnitude in her estimation to make her want to give up. She wants some compensation in satisfying, — concrete results, — not alone in experience.

Attempting a piece of work the completion of which is too remote interferes with good whole-hearted work. The little girl who was required to make a middy blouse by hand could not feel much enthusiasm for her work, for she knew she " would never get it done

anyhow." It is quite essential in any class to provide projects that may be finished within a reasonable time and of such nature that enthusiasm continues to the end.

Another element that makes for good work on the part of a pupil is confidence in her ability to do it. She will continue her work with enthusiasm for a long time if she knows she can master it. It is a serious mistake to permit any one to lose confidence in herself by allowing her to undertake more than she can do reasonably well. The abilities of girls in home economics classes vary materially, and it is a mistake to expect girls in the same class to do the same quantity or quality of work in the same length of time.

Dissatisfactions and discouragements should be foreseen by the teacher and should be averted.

*The wise use of time.* — Possibly no one thing should concern home economics teachers more than the way pupils use their time in laboratory classes. There is so much opportunity for dawdling and fumbling in this type of work that unless pupils are held for a definite amount of work done in a satisfactory manner they fall into the bad habit of wasting their time.

The dilatory way in which they assemble equipment and materials and the indifferent manner of attacking their work is largely a matter of habit, and an alert teacher will not rest until she sets different standards and gets different responses from her class. The teacher is largely responsible for the way in which a class works. Her own tardiness in beginning work promptly and her lack of foresight in directing the progress of the class may be the chief cause. Every lesson should begin on time, should move with good speed, and at its close every pupil should feel the satisfaction of having achieved something.

One teacher was successful in getting a laggard sewing class to accomplish more and better work by having each pupil write on paper the amount of work she felt she could do during the period and having each report at the close of the period. It took a little time at first, but even so, the pupils accomplished more work and finally established habits of concentration and attention to business that were quite gratifying simply because each set an aim and

a pace that she aspired to live up to. A resourceful teacher should manage in some way to stimulate her classes to greater speed. There are all kinds of devices that may be used, but good psychology should be applied.

Occasionally there are teachers who do not distinguish between getting things done in a hurry and making the wisest use of time. The teacher who measured and distributed all of the ingredients to be used by her class in the making of muffins and dictated the method of mixing was evidently more interested in muffins than she was in the growth of girls. She had a false notion in regard to the end to be accomplished. Instead of spending the time in helping the girls to grow in power by doing things for themselves and knowing the reason why, she actually impeded their progress and wasted their time.

Teachers should distinguish between saving time and work for themselves and the wise use of time by the pupils. It is frequently much easier to do a thing oneself than to teach some one else to do it. But what is the teacher's business?

There is much that may be done, however, to save the pupils' time. Having everything at hand and in readiness for work, avoiding all unnecessary dictation of recipes and directions, all superfluous notebook work, and all duplication of work after it has lost educational value are time-saving factors.

To these may be added the great need for habituating the class to the daily routine of the classroom. Washing the hands, putting on aprons, getting supplies, distributing work, passing to and from lockers, washing the dishes, putting the rooms in order — all these and other daily practices should become mechanical and the time consumed should be reduced to a minimum. Time saved from thinking of routine gives just so much more for the real work of the day.

Girls need to be taught how to work in order to save time. The girl who prepares a meal and soils every available dish in the kitchen is not an efficient worker; the laundress who cleanses the clothes in the tub and soils every article she has on is not an efficient laundress. Neither has learned to do things to save time in the

end. Great emphasis should be placed upon establishing good habits of work so that not only time, but energy and materials, may be saved for better purposes.

Some teachers have found it helpful to have pupils time themselves while doing pieces of work in order to determine the minimum amount that should be used by a good worker. Girls have little notion of the value of time or of the value of their work in terms of time and money, and possibly this scheme would be of value in helping them to form an estimate and induce them to work with greater speed. Wherever possible, and whenever a girl is able, to utilize a short cut in performing a process she should be encouraged to do so. If it is possible for her to stitch a straight seam without basting, why insist upon "regular half-inch basting stitches"? If the dishes that are washed in hot soapy water and rinsed with clear scalding water do not need wiping, why wipe them? These suggestions should not be misunderstood. There may be need of careful basting; if so, require it; if not, do not insist upon it for tradition's sake. There may be need of wiping every dish, but the educational value of dishwashing is soon exhausted, and if anything can be done to reduce the time consumed in the process it should be done.

With so many types of duties to occupy a woman's time and attention it is most essential that girls be taught to evaluate the time element in all of their school work, and especially in the home-making work in which most of them will later be engaged.

*The physical conditions of the classroom.* — Other things being equal, the physical conditions under which a class works contribute much to its efficiency. A well-lighted, adequately heated room with plenty of fresh air furnishes an environment conducive to good work. The teacher should give attention to and regulate the lighting, heating, and ventilation, if it is at all within her power. Occasionally she is forbidden to regulate the temperature or the ventilation. Ordinarily, however, most rooms are benefited by having the windows thrown open and the air changed.

Laboratories should be provided with artificial lighting appliances and when necessary the lights should be turned on. It is not un-

usual to see groups cooking or sewing in the dark when just a turn of the switch would have flooded the room with light.

The placing of equipment in the room should be carefully worked out with reference to saving time and energy. This is especially true in laboratories where many utensils and materials are in daily use. The assembling of utensils and groceries, the use of ovens, sinks, towel racks, etc., necessitate many steps, the saving of which should be a consideration. Materials in continual use should be near at hand and so arranged as to be within easy reach; while those that are used only occasionally should be kept out of the way.

It seems almost trite to say "a place for everything and everything in its place," but if the motto were ingrained into every teacher and every pupil there would be less difficulty in those laboratories used by several teachers and many classes. (The type of equipment to meet the needs of different laboratories and different groups of children is discussed in the chapter on "Equipment.")

In addition to the comfort and convenience of the laboratory and classroom its attractiveness has an effect upon the work of the class. Most girls enjoy attractive surroundings, and they are influenced to put forth better effort if their work rooms are pleasant. Many school buildings are old and the classrooms not particularly pleasant to work in. A little effort on the part of the teacher and pupils might do much toward improvement. A rather dark and dingy sewing room in one school was quite transformed by putting white sash curtains at the windows and adding a few gay red geraniums. Ragged shades in another detracted from its appearance, and the girls were pleased with their share in rehemming them and helping to improve the room. The tables and chairs in another were much more satisfying to the classes after a few lessons spent in refinishing them.

Initiative and resourcefulness on the part of the teacher can do much to make any room pleasing, and the effect produced will repay her.

*Attention to supplies and equipment.* — Not infrequently is the efficiency of the class reduced and its progress retarded because

the materials necessary for work are not on hand. Occasionally the grocer or the delivery man may be at fault, but where tradespeople are not dependable the teacher should take this trait into consideration and put her orders in earlier or make sure in some way that she will not keep her class waiting. All staple groceries should be ordered well in advance, and with proper storage space and good refrigeration for perishables a class should never be handicapped for any food supplies.

The lack of temporary equipment for the sewing room, such as needles, pins, thimbles, shears, thread, and other commonly used materials, is inexcusable and should be avoided. Even though the pupils are expected to provide their own supplies an emergency box should be on hand.

The need for keeping all equipment in good condition is very apparent. Dull shears will not cut clean, straight edges; a stove that is full of soot will not bake well; a blunt machine needle will not do satisfactory stitching. Girls should recognize the value of good equipment and only under stress of circumstances should makeshifts be tolerated.

*Skill in the use of illustrative material.* — In nearly all home economics classes much concrete material is in use. Pupils are gaining their ideas and their skill through the manipulation of materials. New relationships are being learned, new processes are being worked out with actual materials at hand. It is quite essential that right habits of work be formed and that an appreciation of high standards of workmanship be developed.

To this end it frequently becomes necessary for the teacher to show a class how to proceed, and she should be able to do this in an effective manner. All the materials to be used should be carefully selected and the teacher should be able to convey to the pupils through her handling of utensils and materials the approved method of procedure, and should also be able to produce such results as will set high standards for the group. The teacher who does not measure accurately need not expect her pupils to be more accurate than she herself is; if the omelet that she is showing the class how to make does not turn out well she need not expect good

omelets from the class; the teacher who does not hold her sewing materials in the correct way will find her class making the same mistakes. Children are great imitators, and the teacher should analyze her own methods of work to assure herself that she sets a desirable example. It is very important that she watch her pupils and help them to acquire such habits as will result in greater efficiency.

In any lesson where concrete illustrative material is being used it is very necessary that provision be made for every pupil to see it without too much effort. Reseating the class or permitting pupils to stand may be necessary; repeating the process for the benefit of those whose positions may have interfered with their seeing it; tipping the bowl or lifting the mixture when making a batter; using large-sized material of distinctive color in the sewing room; these and other devices may be used to good effect.

On no occasion should the teacher herself obstruct her work. This is so frequently done in sewing classes when in her effort to hold the work in a position the class may imitate, the teacher stands between it and the class. It also frequently occurs when the blackboard is being used. Teachers should assure themselves that whatever is intended for the entire class may be readily seen by each member of it, for nothing so demoralizes a class as not to be able to see what is going on. It is time wasted and class efficiency is reduced.

Because of the constant need of illustrative and demonstrative material a foresighted teacher will accumulate a stock and have it in readiness against a time of need. She will anticipate her needs and the needs of her class and will make provision for them well in advance. Her versatility and adaptability are nowhere better evidenced than in utilizing such materials as are easily available in her locality. One teacher never demonstrates because she has no demonstration frame! Another never teaches the cross stitch because she can find no Java canvas! What premium should be placed on originality, initiative, resourcefulness, and adaptability!

*The social organization of the school.* — Without doubt the social organization of the school affects the work within the individual

classroom, and it has become quite as essential for teachers to be interested in the social management of the group as in their intellectual instruction. Certain forms of class organization facilitate social coöperation, and a wholesome rivalry stimulates interest and an ambition to excel. It should be possible to place responsibility for class conduct and achievement upon the class and to permit the class to pass judgment and to impose penalties upon those who do not live up to the requirements of the organization. The student government idea, fostered and guided by the teaching staff, carries with it those principles of democracy which the school should teach and gives pupils an opportunity to exercise their citizenship within the school. Of all institutions the school should be the most democratic not only in composition but in organization. There should be opportunity for exercising initiative, for independent thought and action, for assuming responsibility, and for most hearty coöperation by all members of the group. Laboratory subjects more than any other provide these opportunities, and the skillful teacher will utilize them. Classroom management assumes a very different character when problems of discipline can be made to disappear, as they surely will when the social organization of the school becomes better adapted to the needs of the pupils.

Management and discipline have long been too closely associated. It is time to separate them and to apply the word "management" to the systematic carrying on of the day's work and to allow the word "discipline" to disappear from the teacher's vocabulary.

**Administrative problems of the department.** — The home economics teacher has many problems that are not teaching problems, but which concern themselves more with the machinery of the department and keeping it in good running condition. Some departments are so large that teachers may not have to concern themselves with both the teaching and the administrative work, but on the whole the majority of teachers find it necessary to be equipped for all emergencies that may arise.

*Need for understanding the organization.* — On entering a new position every teacher should acquaint herself with the organization of the department in which she is going to work. She should know

her rank and should understand her relationships to others in the department so that she may perform the duties of her position most effectively. In order to keep the work running smoothly a code of professional ethics should be followed. Recognition of seniority of rank, tenure of service and experience and training, is given as a matter of course, but does not carry with it any handicap for the newcomer.

It is always necessary to know to whom one is responsible and with whom one is to deal in business or professional matters. Where there is a supervisor she should acquaint her staff with such matters. Where there is none the principal or the superintendent will be able to do so.

In those departments where there are several teachers of coordinate rank without a supervisor, it is advisable for the group to organize as a committee, electing one of their number to act as chairman and assume the duties of such office.

It is necessary to know how the work of the department is organized, whether there is a home economics department, or a department of " domestic science " and " domestic art," and what relation these bear to each other.

The teacher should learn as soon as possible the relationship of her department to other departments in the school, and should show a desire to coöperate with other members of the staff to further the best interests of the school.

*Division of work among teachers.* — In order that all phases of the work may be given attention without duplication of effort the routine work of the department should be distributed as equitably as possible. The number of teaching hours, extra-class work, such as marketing, home visiting, caring for the laundry, etc., should all be considered in making out schedules. Teachers should know for what work they are held responsible, not that they may not do more than is expected of them but that nothing will be left undone. Each may expect at the beginning to do much more than the regular schedule calls for, and no doubt would feel slighted were she not included in the necessary extra activities. Where some duties are more irksome or arduous than others it may be well to rotate these

so no one teacher may feel overburdened. Assignments of very early or very late hours may also be rotated to the better feeling of all concerned.

*Buying and storing supplies.* — Every home economics teacher should be a wise spender and should have a knowledge of bookkeeping and accounting sufficient to enable her to look after the financial affairs of the department intelligently. She has need for business ability and should consider this part of her work seriously. Any one who is teaching the science of home-making with all that the term implies of budgeting, wise spending, and accounting should certainly put her knowledge into practice when it comes to handling the business of the department. The wise buyer will know how much she has to spend and will govern herself accordingly. She may see ways of increasing her spending allowance through fairs and sales, but this is a part of her consideration.

It is always necessary to know how to make purchases, — on requisition from the principal or some one in charge, for cash or on account. The committee on finance, the treasurer, or controller will determine the method and it is the business of the purchaser to acquaint herself with it. Without doubt she will have to audit each month's accounts and should preserve all bills of sale in order to check up the account. The financial side of the department should be attended to in a most businesslike way, for in this part of her work the teacher is dealing with business men who expect to do business in a businesslike way.

The distribution of the business of educational institutions makes a difference, and again the teacher should acquaint herself with the pleasure of the board. In some places trade goes to the lowest bidder or to the firm that gives the greatest discount, in others all purchases are made from samples and requisitions are submitted to the purchasing committee. In smaller towns the teacher is frequently permitted to use her own judgment. Other things being equal it is well to distribute trade in a small city or town for various reasons, — it makes for good feeling, it gives an opportunity to acquaint more business men with the home economics work and to secure their interest, it brings various types of people into the school,

and it helps to educate the merchants in regard to their stock and in matters of sanitary handling of food.

To the inexperienced this may seem to make no difference, but a home economics department in any school needs champions and in every business man with whom it deals it has a friend; every delivery man who comes in becomes that much more intelligent in regard to the meaning of the work and consequently that much more interested.

The home economics teacher has need for the business man's good will. She may want the use of a store window for an exhibit, or may want to take her class down to see an exhibit, or possibly may want to borrow illustrative material. There are numerous ways in which the merchant can be of real help, and he will always show the greatest willingness to do all he can if he has any reason whatsoever for becoming interested.

Another problem that confronts the purchaser is the quality and quantity of goods to be bought.

1. Clothing and textile materials. — In the purchase of temporary equipment for sewing purposes, such as needles, pins, thread, thimbles, etc., good standard quality should be supplied and sufficient in amount to last for at least one semester. Even though each child furnishes her own materials it is wise to have a reserve stock to meet emergencies.

The quality of materials for the construction of garments, if purchased by the teacher, should conform to the needs of the children. It is well to give pupils the opportunity to buy, and it may be desirable to allow them to choose from samples brought to class for the purpose. It will be necessary for the teacher to know the stock in the dry goods stores before making demands for certain things. A skillful teacher may do a great deal in improving the stock in the dry goods stores of small towns by consulting with the merchants in regard to materials desired.

Wherever goods are bought in quantity and put into a stockroom as is the case in large school systems or high schools, a competent person should be put in charge and accurate records of sales and receipts should be kept.

Supplies should always be kept in good order and in good condition and the teacher in charge should feel responsible for their security.

2. Food supplies. — The purchase of supplies for the kitchen laboratories entails a great deal of planning and forethought. If storage space permits, it is wise to have on hand a generous stock of the staple groceries in almost daily use. But the character of the daily lessons varies so from day to day that it is more practicable for most teachers to take stock each week and to replace the staples needed and to add such perishables as may be necessary.

Lessons should be planned and supplies ordered far enough in advance to insure no waste of time or energy when the class assembles. There should never be any need for sending special deliveries or messengers, or for losing class time because of the lack of supplies. It should be the teacher's business to see that everything is in readiness the day before and not to wait until a few minutes before class only to be disappointed.

All supplies to be stored should be cared for as nicely as they would be in a well-regulated home kitchen. All containers should be kept scrupulously clean, should be plainly labeled and neatly arranged in order. Pupils should be taught to care for all kinds of food materials as they come from the shops and markets and should have opportunity to discuss qualities and prices and should be encouraged to weigh and to measure to see if correct amounts have been sent. The bill of sale should be kept and at the end of the month some class should feel responsible for auditing the bills.

*Special problems in providing supplies for class work.* — Nearly every home economics teacher finds that she can strengthen the work of her department by supplementing the supplies for which the budget makes allowance, and by providing other opportunities for training in the home-making activities than the school conditions may permit. Planning supplementary work and making arrangements whereby it shall be accomplished requires a great deal of ingenuity and initiative on the part of the teacher.

In connection with the work in cookery, classes are usually limited to specified cost per lesson, or per capita, based on the budget made the previous year. Fluctuating prices, changing attendance, and other varying conditions may make it necessary to provide special funds to maintain the desired standards of class work. Departments may be entirely or partially self-supporting when obliged to be, but it is very evident that this increases the work and the responsibility of the teacher. The high cost of food and its necessary conservation have made teachers very thoughtful in the planning of the food lessons and resourceful in providing supplies and in disposing of the products. Many illustrations verify this, and it is to be hoped that the lessons recently learned will be applied in future years. During the war, in some schools children were encouraged to bring fruit and vegetables from the home garden for the canning and preserving lessons. This motivated the work, reduced the expense to the school, conserved food which might otherwise have been wasted, and increased the supply in the fruit cellar at home. Why should this not be done every year for the same reasons and with the same results?

Lessons in the preparation and cooking of poultry are usually expensive and therefore limited; and a turkey seldom finds its way into most school kitchens. An ingenious teacher advertised that she would be glad to have her classes dress and stuff a specified number of turkeys for Thanksgiving dinners; they were forthcoming and no one can doubt the interest and enthusiasm of the class. Another class prepared and cooked the chickens for a church supper, another baked the hams, and yet another the beef loaves. One can readily see that where contacts are made between the school and the community that many opportunities for extra lessons and further training may be provided with practically no expense to the school. Bread, cake, pie, and candy sales are popular in many places; why should they not be used to motivate school work and give further practice to the girls?

In order to do this kind of work satisfactorily the teacher must not only be skillful in her teaching but must be businesslike in mak-

ing all arrangements and in carrying out any undertaking. Her future success will depend very largely upon the results of the initial undertaking, which should be of such character as to leave no doubt of the teacher's ability.

There are many lessons in connection with the sewing classes for which materials must be supplied and for which special plans must be made. Lessons in patching and darning and renovating require garments on which the work may be applied. Many teachers experience difficulty in getting children to bring worn garments from home. How shall they be supplied? One class found pleasure in mending and cleaning garments that had been contributed for charitable purposes; another was glad to patch garments sent in from a children's home; yet another was glad to remove the spots and press the suits that belonged to orphaned boys. The girls who willingly did this work may not have suspected the teacher's part in providing the garments, but the fact remains that it requires effort and resourcefulness to supply classes with various types of work at the right time, and unless the teacher anticipates her problems and the difficulties which confront her in meeting them many class periods will not be utilized to their best advantage. It is not sufficient to ask the pupils to bring materials from home; for numerous reasons they do not or cannot respond, and it is the teacher's part to meet the situation by having a reserve at hand.

We frequently meet teachers who feel they cannot present practical lessons on home furnishings or the care of special rooms in the home because they have no practice house or special equipment. It has never occurred to them to ask merchants for the privilege of bringing classes to the store to see certain lines of equipment or furnishings or to loan selected exhibits for class purposes. Merchants as a rule are very courteous and show great willingness to extend favors of this kind for educational ends. It is quite possible in some localities to take classes into near-by homes for special class work, or to borrow equipment for specified occasions. Arrangements should always be made in advance and all appointments should be kept.

*Disposal of laboratory products.* — Closely associated with the provision of supplies for class work is the disposition of the laboratory products. Always a problem of serious consideration, it has become more so in recent years because of the increasing cost of all materials. That all foods prepared and all garments constructed should be put to best use is a trite statement, but one which needs emphasis. It is not an easy matter to dispose of the food prepared by the three or four classes that come to a laboratory daily unless there be a lunch room in the building. Where it is possible to utilize the food as a part of some one's lunch it is wise to do so, but on the other hand it is not always expedient to base the cooking lessons upon the needs of the lunch room. Careful planning and coöperation on the part of teachers and lunch room managers should result in working out satisfactory schemes. But the aims of the home economics work should be kept in mind and under no condition should the children be exploited for lunch room purposes.

The preparation of family sized portions of food is gaining favor in school work, and the expense entailed as well as the growing ideas of thrift makes it necessary to plan for the disposal of the product. Food sales and food exchanges are regular institutions in some schools. Sometimes a merchant is willing to permit a food sale in his store or some organization may be ready to donate the materials and to utilize the product.

With help so scarce many housekeepers would be glad to keep in touch with the work of the school, and if they knew what was available would be glad to purchase it. Teachers and pupils could do more to advertise the work of the school, and with little effort could make many more contacts with the homes in the community. Of course it is necessary that products offered for sale be of good quality, but it is not unreasonable to expect well-taught and well-trained girls to produce good results. As suggested above, the strong motive provided insures good work.

*Laboratory housekeeping.* — Nothing so reveals the teacher's standards of good housekeeping and her ability to influence her class in this direction as the way in which she permits her laboratory to be kept. Any one who presumes to teach Home Economics, with

all that the term implies of science and of art, is expected to see that the principles she is teaching are applied in the realm over which she has supervision.

Pupils should begin the good housekeeping habit the very first day they enter the kitchen or the sewing room, and teachers should know enough about habit formation to provide the right conditions and lend the encouragement needed. From the beginning there should be no question as to the methods of proceeding with routine work such as washing and wiping dishes, putting away utensils and equipment, cleaning tables, stoves, and sinks, caring for food, and washing dish towels. Each class should leave the room clean and in order for the incoming group. Until classes have become habituated to the work this means watchfulness, patience, and perseverance on the part of the teacher. Pupils should be taught all phases of housewifery and household management that the laboratories offer and should do their full share in keeping things clean and in order. There are many phases of work other than the daily routine for which they may be held responsible. But at best there will be much left for some one else to look after.

There may be janitors or maids responsible for cleaning floors and windows, for disposing of the garbage, and for the weekly laundering of towels. The teacher should know what kind of service to expect and should know how to secure it.

It will be a part of the teacher's work to see that equipment and furnishings are kept in repair and when necessary discarded and replaced. She should know enough about all household appliances to determine when it is necessary to call in the expert for repair work or whether she or a pupil can do it. It will be a part of her housekeeping duties to see that supplies and equipment are properly stored during vacations and that inventories are made and properly filed.

*Popularizing the work of the department.* — In spite of its established reputation as a school subject the nature and worth of Home Economics is none too well known in many communities. The subject has undergone many changes since its first introduction as an organized study, and it is important to keep those who should

be interested in promoting it informed as to its content and the contribution it has to make to the education of girls.

Within the school itself it is necessary to acquaint members of the staff and pupils not taking the subject, with the work of the department so that they may be intelligent when making programs for other semesters.

All teachers are expected to promote the work of their departments in every legitimate way; the teacher of Home Economics is fortunate in having a variety of means at hand. She can always talk about her work and should be prepared to do so at staff meetings, at student assemblies, and before any local organizations that may wish her to do so. She may use the columns of the newspaper to acquaint patrons of the school with any new or interesting features of the work. This is a most effective way of reaching the public especially in small cities or towns.

The opportunities of serving refreshments at school parties, of extending invitations to the various luncheons and dinners prepared and served by pupils, should be used to acquaint the guests with the work and possibly with the needs of the department, as well as for pleasant social intercourse.

Exhibits of various types of work placed in the school corridors, special exhibits to which the public is invited, educational exhibits prepared by students and placed in store windows, public demonstrations along some line of general interest, — all are useful in educating the public as to the nature of the subject and when the work is well done exert a strong influence as to its worth.

For the sake of her work the teacher of Home Economics should make contacts with just as many homes and organizations as is possible. Every one whom she can interest is a valuable asset to her work. School subjects, like people, need friends to help them grow, and Home Economics especially needs the help and kindly criticism of the members of the community if it, in turn, is to be of greatest value to the homes in that community.

*Reports, recommendations, and budgets.* — It is a customary proceeding to keep records and reports of items of interest in connection with a department and to compile statistics for comparison

from year to year. The nature of these reports differs with the school systems and it is well to become informed regarding requirements.

For her own satisfaction every teacher should know the upkeep cost of her department and should be able to account for the variations in different years. She should know the per capita cost of the work and should be able to increase or to decrease to the greatest advantage of the pupils. She should analyze the results of the year and determine wherein the work may be improved and strengthened.

On the basis of her analysis and the figures at hand she should be able to report to the board and to make such recommendations for the following year as her judgment justifies. She should estimate the probable cost of the next year's work and be ready to present a budget if called upon to do so. In all her dealings with school boards the teacher should be very businesslike. She should keep in mind the interests of the school, and of her department in particular, and should be able to present in a convincing way any question which may need consideration. She will be judged not only by her success in the classroom but by all of her dealings with people outside the classroom as well.

*Staff meetings.* — Where there are two or more teachers working in the same department it is very important that they get together at specified intervals to exchange ideas and to learn what the department as a whole is doing. The supervisor of the department or the chairman of the group should call and preside at these meetings. The problems to be discussed will vary, but they should be so vital to every member of the group that she feels repaid for the time spent. Individual problems, plans for improving or modifying the work, the welfare of students, special reports, these or other interesting discussions are profitable. It is advisable at times to invite members of other departments or persons engaged in other work to talk over problems of common interest.

These meetings should result in a better understanding of the aims of the work and of the methods for accomplishing them. A strong spirit of coöperation and mutual confidence and respect is

essential to effective team work in any department, and the greatest effort should be made to promote and to maintain harmony among teachers working for common ends.

In addition to departmental staff meetings, the home economics teacher should attend all regular and called teachers' meetings. She should acquaint herself with the school and its problems and should study the relation of her work to the best interests of the school. Contact with others engaged in similar lines of work increases the professional spirit and shows itself in renewed interest and effort.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Try to defend the statement, "She is a good teacher but a poor manager."
2. Analyze the factors that make for industrial efficiency.
3. Which of the above factors should find a place in the schoolroom?
4. What should be the difference in output of school and of factory?
5. What is meant by the social management of a class?
6. What do you do to maintain or to improve the health of your pupils?
7. (*a*) How do you keep up the morale of your classes? What success have you had? (*b*) What opportunities do you give for doing coöperative work? (*c*) How many of your girls really felt the worth of their last lesson?
8. What devices have you for saving time in doing necessary routine work? How much time would be wasted in the entire school if each class wasted as much as yours?
9. How could your equipment be arranged to save more time and energy?
10. What kind of illustrative material did you use in teaching the lesson on the making of buttonholes? Was it effective? How do you know? What factors enter into the preparation and use of illustrative material?
11. What opportunities have the pupils in your school for exercising their citizenship in a democratic group?
12. What are you doing as teachers of Home Economics to bring about stronger coöperation between the members of your department, and your department and the entire school?
13. What have you done to strengthen or to improve the work of Home Economics in your school the past year? What are you planning for next year?

## REFERENCES FOR COLLATERAL READING

Classroom Management. Bagley.
A Brief Course in the Teaching Process. Strayer.
Introduction to High School Teaching. Colvin.
Introduction to the Scientific Study of Education. Judd.
The Teacher. Palmer.
The American High School. Brown.
Methods of Teaching in High Schools. Parker.
Science Teaching. Twiss.
Domestic Art in Woman's Education. Cooley.
Shelter and Clothing. Kinne and Cooley.
Foods and Household Management. Kinne and Cooley.
Clothing for Women. Baldt.

## CHAPTER XIII

## STANDARDS FOR TESTING METHODS OF INSTRUCTION IN HOME ECONOMICS

I. The quality of instruction.
II. The aims of instruction.
  A. Imparting knowledge.
  B. Right methods.
  C. Standards for judging instruction.
III. The main objects or purposes of instruction in the teaching of home economics subjects.
IV. Factors worthy of acceptance as standards in judging method.
  A. Appeals to pupil's own present interest.
  B. Stimulates the pupil to want to coöperate in community needs and interests.
  C. Teaches pupils to weigh values and cultivates independent effort in the organization of work.
  D. Exemplifies methods found to be effective for the type of home represented by the group.
V. Home economics studies are social studies.
  A. Flexibility in teaching them.
VI. The best modern methods are possible.

**The quality of instruction.**—All teachers should be very conscious of the responsibility constantly confronting them of measuring the results of their instruction. An up-to-date teacher is always on the lookout to see if her aims are being accomplished. The means of achieving her aims, as well as the aims desired, must be definitely planned if she is to know finally whether they are being attained. There may be numerous aims and various means of accomplishing them. Judgment of the quality of instruction or methods of procedure is one means of weighing what is being accomplished by any particular study.

*The home economics teacher* through her personal influence accomplishes some of *her aims;* through her wise plans in selection and organization of studies, she attains others. By the checking up of work through home visits and credits she may accomplish still other aims, but probably no one phase is so well worthy of study as the quality of instruction which she is giving and how to attain the best results through this instruction.

**The aims of instruction.** — *Imparting knowledge.* — One of the aims of instruction is to impart knowledge in any particular field of study. This prominent aim is often tested through examination, and very often pupils are parrotlike in their ability to reproduce the subject matter which has been acquired through a certain kind of " pouring in " process, their ability to reproduce depending on how recent the review has been, or on other conditions. This is a narrow way of judging if knowledge has been acquired.

*Right methods.* — Dr. Frank McMurry in his book *Elementary School Standards* says that one needs to know other things besides the subject matter of the particular study. He claims that the sort of knowledge which teaches one right methods of work is probably more important. Which is more essential, from the home economics point of view, to make one particular kind of good looking cake or biscuit through following explicit directions given by the teacher, or to learn the effect of certain methods of mixing in preparing cake or biscuit, or the control of oven heat in baking them, in order to mix and bake all batters well? Should the pupil follow the teacher's minute directions in constructing costumes in the study of color and line in relation to one individual girl or figure or should she be taught to discover possible correction of color and line in costumes for all types of figures? The pupil should be led to study a method of attacking a problem, to acquire right mental habits and methods of study.

*Standards for judging instruction.* — Have we any standards by which it is possible to judge how good or poor a teacher's instruction may have been? Cannot certain standards be chosen by which methods of instruction in Home Economics can be judged as well as other studies of the school curriculum?

Standards for measuring purposes, means, and results of instruction are like searchlights for the use of the teacher. She should turn them often upon her work so that they may guide her as they light the way. They should help her to see if her work with her pupils is measuring up to those standards, and if not, should influence the direction of her course of procedure. More and more shall we evolve better standards for our work in home economics teaching; but certainly, if the following measures are used now, the teaching results are bound to show in the improved methods of work in the homes of any community. Dr. McMurry has suggested that this is a sound principle, that "purposes in any field of activity should be the standards of value in that particular field." Knowledge has been used as one of the standards of value, but not as the most prominent. A good working hypothesis then, in studying this subject of the quality of instruction and how to test it, is to assume "that the leading purposes of instruction must form the basis for judging its quality."

**The main objects or purposes of instruction in the teaching of home economics subjects.** — Are they not the same as in any field of learning — that control of "spiritual and material advancement" which will enable the individual to attain power, to overcome difficulties which prevent well-ordered daily living and participation in the affairs of society, — in other words to produce the thoughtful, high-minded, conscientious woman ready and able to do her share in the world?

The following statement of Dr. McMurry, although concerning elementary school studies in general, finds its application in the home economics field:

> We must look directly to the life about us to find what subject matter the school should offer and how this should be treated. The curriculum will be good to the degree in which it contains problems — mental, moral, æsthetic, and economic — that are socially vital and yet within the appreciation of the pupils; and its method of presenting that curriculum will be good to the degree in which it exemplifies the methods of solving problems found most effective by the world's most intelligent workers.

The close relationship between some studies and life is not so clearly defined as in the home economics field, but even here

teachers sometimes fail to make connections and to teach their subjects so that they function in the daily lives of their pupils. Why should not home economics teachers fall in line with the best modern educational thought of our times, and so plan the methods of instruction in this field as to attain this chief goal of participation in social life?

**Factors worthy of acceptance as standards in judging method.** — Dr. McMurry considers the following five factors, because of their universality, particularly worthy of acceptance as standards by which to judge method. The main elements in daily living, perhaps most common to every person's welfare, and which might be used as standards in judging, are the following:

1. *Motive* on the part of the pupils.
2. *Consideration of values* by the pupils.
3. *Attention to organization* by pupils.
4. *Initiative* by pupils.
5. *Application* by pupils.

Let us interpret these factors in their relation to the home economics studies in the following theses:

*Home economics teaching is good in proportion as it makes its appeal to the pupil's own present interest as a member of her family group.* — The girl at all ages has her own special problems that are of vital importance to her, — what color hair ribbon to select for her new dress; how to spend her five cent allowance to obtain the greatest return in satisfaction and happiness; what to make for mother's birthday gift, or prepare for the surprise anniversary dinner, how to help with the Red Cross work or the church supper, — these and like problems varying in degree with her age and development are the foundation stones of interest on which to build that body of subject matter and projects which constitutes home economics study. To arrange the work on the basis of the practice sewing piece before applying to any project, or on the study of each of the food principles in detail before their combination in the meal, is to exalt the technical aim and deaden the natural interest in an otherwise absorbing problem.

*Home economics teaching is good in proportion as it stimulates the pupil to want to know and to want to do, in coöperation with others, those things which are needed by the community of which she is a part* (city, state, nation, international relationships). — The desire to know and to do for one self and one's immediate circle of family and friends is not necessarily a matter of education. It may be said to be instinctive. Upon this inherent interest the subject of Home Economics builds. The girl takes a natural interest in such a problem as this:

"What must a girl of my age know of food, clothing, and cleanliness in order to help my family to keep well and strong and happy?"

The utilization of such personal interests is legitimate and indicative of good teaching, but the task is only "well begun" and hence "half done." The widening of the field of interest may follow through such problems as these:

"What are our responsibilities outside the four walls of our home?"

1. Civic housekeeping.
2. Pure food.
3. Consumers' League.
4. Child labor.
5. War relief work.

"How can I prepare myself to be a helpful factor in the community?"

The home economics studies are peculiarly fitted to function in the development of the social idea in the girl's life. Coöperation in classroom, home, and community is necessary for harmonious and effective work; and when taught with this ideal in mind, the home economics studies are bound to create in the girl the desire to know and to do, in coöperation with others, those things which are needed in the community of which she is a part.

*Home economics teaching is good in proportion as it teaches the pupils to weigh the values of various methods of attacking home problems, and as it cultivates independent effort in organization of work.* —

It is not sufficient that the pupil feel an interest in home and community problems directly related to home economics studies, but that she should be able to participate in forwarding the interests of home and community when she is able to distinguish essentials from nonessentials in a given situation, and is able to decide how to deal with them sensibly in her methods of work. This is a matter of learning how to choose, a weighing of the relative value and importance of things, a study of the relative worth of methods of procedure. Whether it is the mixing and baking of a cake or the making and trimming of a hat or gown, the cleaning of a room or the keeping of household accounts, relative values of methods of attacking the problem must be decided upon.

Not only must choice be made in relation to relative values of ways of doing things, but organization of ideas or system is necessary if the pupil's efforts are to be of most value to her community. Organization of ideas and facts leads to self-reliance and independent effort in work. It is not sufficient that the pupils know facts but that the facts should be organized, labeled, and ready for use.

*Home economics teaching is good in proportion as it exemplifies methods found to be most effective for the type of home represented by the group.* — To this end it is essential to give such subject matter as it is practicable for the pupils to make use of in their own homes. It will be necessary to understand the social and economic needs of the group and to utilize such materials in all phases of the work as are consistent with the standards of living in the homes represented. To illustrate, for the type of girl whose family income warrants the purchase of high-priced food materials the kind of dish prepared might differ from that given to a group whose family income is limited, even though the principles involved in preparation would be the same. There will be little reason for teaching the Russian and English form of table service to a group whose simple meal may be eaten in the combination kitchen and dining room.

In the sewing classes one is not warranted in insisting upon elaborate handmade garments of fine and delicate fabrics when economy of time, effort, and material, are paramount factors in determining the wardrobe. The use of the sewing machine in

constructing simple, durable garments would seem to accord better with the ideals in teaching Home Economics.

Materials and equipment known to be beyond the means of the group would better not be considered, but the highest attainable ideals should be held.

When the school work is made to seem desirable and practicable to the parents as well as to the students there will be less likelihood of its failure to function in the home.

**Home economics studies are social studies.** —The studies represented in this field are social studies and should be selected, adapted, and taught in such a way as to meet the present needs of the pupils as represented by their mental and social growth, as well as in relation to the needs of the community. The teacher in her method should be guided by the needs of the girl at the present moment as well as by her previous experience, rather than by the future needs of the girl.

*Flexibility in teaching them.* — In the teaching of the home economics studies the teacher should be allowed the greatest flexibility based on certain established principles. This stimulates initiative on the part of teachers and principals and leads to experimentation and testing of various methods in this field of education. The slogan of all teaching of Home Economics of to-day should be "True to Life." The selection of subject matter, the method of presenting it, the manipulation of materials, the laboratory conditions, the motive for practical work, all should reflect life as it is and as it may be raised to the highest plane to which it may attain in the homes of the pupils, or in the homes or industry into which they may go.

**The best modern methods of teaching are possible in the home economics studies.** — Even with the most wisely chosen equipment the home economics studies are dependent for their success upon the methods employed in their presentation. The day for the teacher who offers a "pouring in" method of instruction is over. The home economics studies should be taught in such a way that the reactions of the pupils will show their ability at school and in the home, to proceed with initiative, their power to organize their

ideas according to their relative values, and to arrange methods of procedure accordingly. This is not the result of haphazard methods of instruction, a recipe placed on the blackboard, stitches taken by the teacher for the child, but is the result of careful planning on the part of the teacher, so that the pupils seek and acquire knowledge through their own questioning. The art of teaching has been applied to many fields of instruction, but has often been omitted in this field of Home Economics, where it has sometimes deteriorated to simply a process of showing, with no attempt at organization of subject matter or ideas.

Teachers of Home Economics as well as teachers of other subjects are looking forward to the time when more definite means of measurement may be employed in testing the progress of children and the efficiency of the teacher's methods of instruction.

Successful scales for measurement are being used in mathematics, spelling, writing, language, and other studies; and already attempts are being made to establish scales for the various phases of the home economics studies.

The problem method of organization of subject matter in home economics studies is tending to force many teachers into the position of viewing these subjects in a new light; of seeing them not only in a purely logical way, but in a psychological way in relation to the point of view of the pupil, as a definite problem to be solved by the pupil. The pupil should know the problem for the term. It may be stated concretely, as for example, "How can I help share my father's and mother's responsibilities in the home?" This problem is solved by the pupils as various sub-problems and particular projects are presented which contribute to the solution of the big thought for the year. A subject so closely related to life offers every opportunity for basing the work upon the pupils' daily needs, and the importance of these cannot be overestimated. "What are the problems which confront the families of my community?" "How can I as a teacher of Home Economics help to solve these?" The high cost of living and the difficulties of conservation of materials to-day present common problems for all teachers in the field of Home Economics.

No field in the modern educational world offers a wider opportunity for experimentation. How do the various methods of teaching work? Which gives the best results in terms of pupil activity and accomplishment? It requires patience and a broad vision when the work is poorly done for a teacher to see beyond the puckered hat brim and the tough omelet, into the deeper training values of life; but modern life demands the spirit of investigation.

## SUGGESTIONS FOR STUDY AND REVIEW

1. What is meant by quality of instruction in the teaching of the home economics studies?
2. What should guide the teacher of Home Economics in formulating her aims of instruction?
3. Read the first twenty-five pages in Elementary School Standards by McMurry.
4. Explain what Dr. McMurry means by standards for judging instruction.
5. From your own life experience tell what you think should be the main purposes of instruction in teaching Home Economics.
6. Discuss one of the factors named by Dr. McMurry as worthy of acceptance as a standard by which to judge method.
7. Write two hundred words on the subject of organization of ideas in methods of teaching.
8. What is meant by "motivation" of the home economics studies?
9. Discuss Home Economics as a social study.

## REFERENCES FOR COLLATERAL READING

Elementary School Standards. McMurry.
Methods of Teaching in High School. Parker.
The Method of the Recitation. McMurry.
The Learning Process. Colvin.
How to Teach. Strayer and Norsworthy.
How We Think. Dewey.
A Brief Course in the Teaching Process. Strayer.
Principles of Teaching. Thorndike.
The Measurement of Certain Elements of Hand Sewing. Murdock. Bureau of Publications, Teachers College, New York City.
The Measurement of Educational Products. The Seventeenth Year Book of the National Society for the Study of Education.

# PART IV

## PERSONNEL, MATERIALS, AND OPPORTUNITIES IN THE TEACHING OF HOME ECONOMICS

## CHAPTER XIV

## THE TEACHER AND THE SUPERVISOR OF HOME ECONOMICS

I. The teacher and the supervisor of Home Economics.
   A. The helpful teacher.
   B. As a citizen and community leader.
   C. Keeping up to date.
II. The preparation of teachers of Home Economics.
   A. Training for the elementary grades or the Junior High School.
   B. The training of teachers for Senior High School.
   C. The training of teachers for continuation and evening school classes.
III. The training of the supervisor of Home Economics.

**The teacher and the supervisor of Home Economics.** — How often in reviewing one's school days the image of some teacher rises before one as the best loved one, the most helpful teacher, the most considerate one! Did you ever stop to analyze why some teachers are more helpful than others and have the power to influence, to inspire, to direct, guide, and help the student towards greater and better attainments along the general walks of life or the particular lines of school achievement? In other words, upon what does success depend in this most vital of all arts, the teaching and guidance of youth? We hear sometimes of the ideal teacher. What are her characteristics, — what makes her so helpful? Is this truly successful teacher of Home Economics different from any other helpful teacher, because she is teaching this particular subject?

*The helpful teacher* is one who seeks to develop the individual pupil, who aims to discover the best in each one and endeavors to advise and suggest, to guide and help until this best, whatever it may be in each, is liberated. "Set the noble free" might well be the motto for all teachers and supervisors.

To help teachers and supervisors locate their own strong and weak characteristics

# Teacher Personality

To help supervisors help where help is most needed

For checking and rechecking by teachers, supervisors, normal schools before admission and during course, would-be employers, placement and guidance bureaus, teachers' agencies and surveyors
Check (✓) after items which describe conditions. Use ? if a further visit is needed before marking

Name .....
Position .....
Marker .....
Position .....

## *Appearance of room*

| | | | | |
|---|---|---|---|---|
| 1. Order | notable | fair | poor | disorderly |
| 2. Decoration | attractive | overdone | unattractive | lacking |
| 3. Windows | open—yes | no | clean | unclean |
| 4. Air | fresh | fair | stale | |
| 5. Blackboards | much used | little used | unused | tidy, untidy |
| 6. Number of pupils | overcrowded | full | vacant seats | |

## *Teacher's voice*

| | | | | |
|---|---|---|---|---|
| 1. Pleasing | harsh | | shrill | nagging |
| 2. Clear | indistinct | foreign pronunciation | | bad grammar |
| 3. Low | medium | | too high | |

## *Teacher's physical appearance*

| | | | | |
|---|---|---|---|---|
| 1. Vigorous | passable | weak | timid | |
| 2. Healthy | healthy but tired | anemic | | sick |
| 3. Well-poised | medium | | nervous | |
| 4. At ease | medium | | embarrassed | |
| 5. Correct, erect posture | stooping | bad habits | slouching | |
| 6. Neat | tolerably | bad taste | slovenly | hypercosmetic |

Position .....

[over]

School..... City.....

***Personality characteristics of teacher***

| | | | | |
|---|---|---|---|---|
| 1. **Pleasing** | very | tolerably | unpleasing | displeasing |
| 2. **Courteous** | very | moderately | little | discourteous |
| 3. **Cheerful** | very | moderately | little | gloomy, sullen |
| 4. **Industrious** | very | tolerably | lazy | |
| 5. **Sympathetic** | very | moderately | unsympathetic | unkind |
| 6. **Enthusiastic** | very | moderately | little | lacking |
| 7. **Dignified** | very | moderately | little | undignified |
| 8. **"Well-bred," polite** | notably | acceptably | "on the way" | ill-mannered |
| 9. **Tactful** | very | tolerably | blundering | |
| 10. **Stimulating** | very | moderately | lacking | |
| 11. **Humorous** | very | moderately | little | lacking |
| 12. **Encouraging** | very | moderately | discouraging | nagging |
| 13. **Scholarly** | very | fair | too technical | unscholarly |
| 14. **Resourceful** | very | fair | unresourceful | unimaginative |
| 15. **Systematic in thought** | very | tolerably | unsystematic | |
| 16. **Strict** | very | moderately | lax | irritable |
| 17. **Wins coöperation** | easily | fairly | antagonizes | |
| 18. **Self-controlled** | very | moderately | little | |
| 19. **Ambitious professionally** | quite | not yet | seems to be lacking | |
| 20. **Teachable** | quite | with difficulty | doubtful material | |

***Comment of teacher or supervisor*** — verbal or written but confidential

**INSTITUTE FOR PUBLIC SERVICE, 51 Chambers St., N. Y. City**

5 for 10¢; 10 for 15¢; 50 for 50¢; per 100, 75¢; per 1000, $5.00 — Postpaid

The truly successful teacher of Home Economics is interested in human nature. She has time and thought and interest to give to the individual pupils in her classes. Pupils are very keen and any lack of genuineness in this interest will be instantly registered. In her dealings with her pupils she should be earnest but not too serious, firm as well as kind and sympathetic.

All teachers and supervisors of Home Economics should study their own personalities. The Teacher Personality card on pages 344 and 345 may be helpful to teachers in locating their own strong and weak characteristics and may prove of value to the supervisor in her endeavor to be of help to the teachers working under her.

The score card is also of use in helping the supervisor to estimate values. Many have been prepared. The following prepared by Mr. Haines, Principal of the Bayonne High School, New Jersey, is suggestive, but any supervisor can work out her own score card according to her needs.

### Score Card for Rating Teachers

*Teacher*..... *Date*.....

| A — Discipline | *Possible* | *Allowed* |
|---|---|---|
| Voice — tone and manner | 5 | |
| Self-control | 5 | |
| Tact | 5 | |
| Firmness | 5 | |
| Dignity | 5 | |
| Sense of justice | 5 | |
| Enthusiasm | 5 | |
| Manner of assembling and dismissing classes | 5 | |
| Alertness | 10 | |
| Pupils' respect for teachers | 15 | |
| Pupils' habits of neatness and order | 15 | |
| Pupils' behavior | 20 | |
| Total | 100 | |

B — Interest

| | |
|---|---|
| Time spent outside of class hours in preparing work or equipment | 20 |
| Zeal in preparing devices for interesting pupils — exhibits, charts, models, etc. | 20 |
| Time spent outside of class in helping pupils | 10 |
| Interest in pupil activities | 10 |
| Coöperation with other teachers | 10 |
| Efforts at self-improvement — attending educational meetings and visiting other schools | 10 |
| Reading professional literature | 10 |
| Taking professional courses | 10 |
| Total | 100 |

C — Teaching Ability

| | |
|---|---|
| Knowledge of subject matter | 5 |
| Organization of subject matter | 10 |
| Presentation of subject matter | 10 |
| Professional preparation | 3 |
| Use of English | 3 |
| Records of pupils' progress | 3 |
| Accuracy | 2 |
| Initiative and resourcefulness | 2 |
| Neatness of shop or classroom | 3 |
| Efficient care of equipment and materials | 4 |
| Attention to individual needs | 5 |
| Interest of pupils in their work | 25 |
| Progress of pupils | 25 |
| Total | 100 |

The following personal qualities suggested by the Albert Teachers Agency as having economic value are also suggestive and lead to careful self-analysis on the part of a young teacher and an endeavor to cultivate new habits.

### Personal Qualities Having Economic Value

1. Initiative, energy, aggressiveness, force, ambition, persistence, decision.

2. Tact, discretion, tolerance, coöperation, courtesy, power to suggest, persuade, control.

3. Independence, originality, responsibility, self-possession, poise, control of nerves.

4. Honesty, fairness, loyalty.

5. Cheerfulness, sympathy, hope, vivacity, enthusiasm, humor.

6. Faith, courage.

7. Imagination, alertness, resourcefulness, memory, judgment.

8. Power to tell a good story. Conversation, personal interview.

9. Voice: Pleasant, clear, smooth, musical, decisive, modulated, cultivated. Not loud, but with sufficient power to make yourself easily understood in conversation or over the 'phone.

10. Manners: Conventional, graceful, natural, quiet, free from peculiarity or eccentricity.

11. Smile: Pleasant, cheery, attractive, natural, genuine.

12. Handshake: Warm, cordial, not clammy, listless, uncertain.

13. Postures: Erect, refined, graceful, *never lounging*, dignified.

14. Dress: Conventional, not showy, neat.

*As a citizen and community leader.* — The teacher of Home Economics should be willing and desirous of taking her place as a citizen in the locality in which she is teaching. She should participate in the community activities and coöperate with others in carrying forward all projects that make for better living. There is great opportunity to exercise leadership in establishing boys' and girls' clubs and mothers' clubs, whose aim should be the betterment of home and community conditions. This is especially true in small towns and rural communities, and she should take her place as an active advocate of her subject. Never before had the teacher of Home Economics had such rare opportunities to be of real service as during the days of war problems. There is every indication, too, that during the reconstructive years she will figure in community life as never before.

The teacher of Home Economics, because of the nature of her subject and because of her unusual opportunity to become ac-

quainted with individual pupils and various groups, should be a strong influence in her school. She should be able to assume responsibility in school affairs and to take an active part in solving its problems.

*Keeping up to date.* — All teachers of Home Economics should realize the necessity for "keeping up" with the progress being made in the home economics field of study. There are several ways of doing this:

1. By attending Teachers' Institutes and Conventions. One meets there people with kindred interests and hears vital problems relating to the work discussed. Such associations as the National Education Association, the American Home Economics Association, the local state Teachers' Associations, all furnish this kind of opportunity, for a teacher of Home Economics should be informed of progress along general lines of education as well as her special line of interest. Through the journals and publication of their annual proceedings one can also keep in touch with current thought, but the inspiration of contact with workers is lost if one does not attend the meetings.

2. Summer school courses offer another means for supplementing one's training and give one a new and fresh point of view, especially if taken in a section of the country removed from one's own environment.

3. Through clubs. Reading circles have been started by many progressive teachers and offer incentive because of the benefit derived from the discussion of some new home economics book or one on some general education subject.

4. The publications of our government, the current magazines on education, books on general education and special home economics topics all help to keep the up-to-date teacher abreast of the times and in touch with the latest trend of thought in education. See the bibliography for sources of help (page 420). One can keep this list up-to-date by keeping in touch with one's local public library and by writing to government bureaus and publishing houses for their latest publications and catalogues.

**The preparation of teachers of Home Economics.** — In the early

days of Home Economics in schools, women who were especially skilled in the arts of sewing and cooking were considered quite competent to teach what was called domestic science and domestic art, or more generally cooking and sewing. For the most part those teachers were splendid practical women and did the pioneer work in these fields. It is to their earnest efforts that much of the success of establishing this work in schools is due. With the changing attitude towards the content of the subject and with the change in educational theory there has come the demand for professionally well-qualified teachers. There is a great demand for the technically efficient teacher, but she must have additional knowledge in order to make her work effective. She should be interested in current educational problems, and should have a knowledge of psychology and pedagogy. She should be able to apply educational theory to her practice, to the same high degree that is demanded of the best teachers in the educational profession. There is no reason for isolating the subject of Home Economics or the teacher because this subject is a " special " one, and the teacher a " special teacher." The same principles apply to this field, and nothing short of the very best in organization of work or method of presentation should satisfy.

*Training for the elementary grades or the junior high school.* — The period of elementary education is not one of specialization. The aim of home economics instruction in the elementary school or junior high school is not to produce girl specialists in any one line of work, but to lay a broad, liberal foundation for the problems, activities, and duties of the home and community and to give a degree of skill in home processes commensurate with the needs of the girls in their home life, and one on which the high school may build its more specialized and intensive studies. It follows, then, that the home economics teacher of the elementary school must be one of broad sympathies, capable of appreciating the needs of her pupils and conversant with their environment and problems. With this end in view it is necessary that the training for such work be general in character rather than specific or intensive, along narrow lines. Her knowledge of child study and psychology and

her comprehension of the field of Home Economics should help her to understand her pupils at the various stages of their development and assist in determining just what in the subject will make the strongest appeal to them at the particular time, as well as the most forceful methods of presentation. A sympathetic understanding of the other subjects in the curriculum will help the teacher of household arts to link and correlate her work with that of the other instructors.

What training then should be given to a teacher preparing for this elementary field? Should it not be broad and liberal in character rather than too intensive along any one line and consequently narrow in scope? It should include thorough work in the sciences both natural and social, and in such phases of art and design, textiles and clothing, food, sanitation and home management as will give her the underlying principles of each of the subjects, sufficient skill to teach the technical processes accurately, and a vision and appreciation of the worth of these studies in the life of the girl for the development of character and high moral and social principles.

Where shall this teacher be trained? She should have as a basis for this special training a high school course or its equivalent. This should be followed by at least two years of normal technical training in Home Economics, to include methods of teaching the special subjects, with practice teaching as well as the studies outlined above. The training should in every way be as thorough and comprehens ve as that demanded for the teacher in any other subject.

If, as occurs under some conditions, the aim of the junior high school work, for certain pupils, is to shorten the period of apprenticeship in trade, then it is desirable, if a trade teacher is not available, that the teacher of Home Economics should have had experience in the trades for which the school prepares, in addition to her teacher training work, in order that she may know the demands of the industry and the most effective preparation to meet them.

*The training of teachers for the senior high school.* — The teacher of Home Economics in high school will have to be capable of teaching these studies in a more specialized way. She may have classes

in which the pupils will have definite vocational aims as well as classes in which the work will be general in character.

1. *Courses of study.* The teacher in this field should have had a four-year college course leading to the degree of Bachelor of Science, or the equivalent of such a course in an approved college or university offering home economics training. Such a course should include:

1. Technical training in Home Economics with specialized work in the various phases, and in connection with these special studies the related sciences and arts.

2. Strong courses in education, including psychology, child study, principles of teaching and methods of teaching Home Economics.

3. As many courses in literature, history, sociology, economics, and modern language as time permits.

4. The teacher of home economics studies in the high school often has the special responsibility of helping her pupils to meet the requirements of higher technical institutions. She must know the requirements set by the various institutions to which her students may go for advanced training, in order to plan the home economics studies in high school to meet these conditions. Some part of the training of this high school teacher of Home Economics should include this knowledge — perhaps in some course in education — in order that she may wisely direct those students who will continue these studies after high school.

5. The teacher of Home Economics in high school should have preparation for her work which will give her a broad vision of the relation of her subject to the rest of the curriculum as well as to interests of the community, and it is of paramount importance that the present and future welfare of her pupils be of greater interest to her than the development of the special subject which she is presenting.

2. *The training of the teacher of vocational studies in high school.* — Many of the vocations formerly carried on in the home have become commercialized. We think at once of cooking, millinery, dressmaking, etc. These studies can be thought of as vocational

industrial studies which are the outgrowth of the home economics studies, and in the high schools of to-morrow, opportunity will be given to pursue these lines of work as well as the studies which prepare for vocational home-making. Teachers must be trained to meet these requirements of vocational education along both the industrial and home-making lines, which are being fostered by federal appropriation for vocational education under the Smith-Hughes Act.

The teacher of vocational home-making in a vocational school should be prepared to teach the many household activities, "as practiced by the wife and mother in the home." Comparatively few homes in the United States, about 20 per cent only, have any kind of domestic service, and the necessity for training teachers of vocational home-making is most urgent, for they in turn will train the home-makers. A teacher trained in Home Economics may be able to teach general household arts for appreciation in the grades or high school, but in order to train home-makers in the vocational home-making classes she will need a different kind of training from that which the teacher of general household arts will need. She must have had as part of her training much practice in the doing of things and in the actual management of a home. How can she teach home-making if she has never had any home responsibility or enjoyment of a home? It is not sufficient that she should know the technique of sewing and cooking, but she must be experienced in the actual management of the affairs of the home. She must understand the spiritual side of home-making as well as the material and be able by her precept and example to make her pupils feel the beauty of a true home and the atmosphere which should be created in such a place. This means that in the training of such a teacher there must be *practical* participation in this field of home-making which will enable her to train her students intelligently to meet the problems of this vocation. She will need to be trained in academic and technical studies also as outlined for the high school teacher, and in addition should have this special training. The practice home becomes at once one of the opportunities for the training of the teacher of

home-making, and coöperation with the actual homes of the locality for school credit, another valuable opportunity for practice. In normal schools where training is offered along these lines every student who expects to pursue this special line of teaching should have sufficient practice in the practice home, with opportunity to engage in all of the home activities as well as in its management.

The teacher of vocational industrial studies, outgrowth of the home economics studies.[1] — No teacher should engage in these highly specialized lines of teaching who is not very strong in trade or technical knowledge of the subject. She must have had intensive study along her line of specialization and much opportunity for practice or trade experience. No one can teach catering effectively who has not engaged in actual commercial work in catering, and who does not know the problems involved in purchase of supplies, preparation of food in large quantities, and the marketing of the food. Neither can trade dressmaking be taught by a novice who may have made three or four dresses while in training at a normal school.

The training of this specialized vocational teacher is a difficult matter. Real experience must be a part of her training, an absolute fundamental. Actual trade experience is difficult to obtain in the training school itself, and the tradeworker as a rule is not gifted in the art of teaching and often unprepared in other subjects. The most successful method of training trade teachers to-day is the plan of encouraging trade workers, with the personal qualifications and trade experience, to take an evening introductory training course in preparation for teaching. This gives the initial teaching equipment. They may then serve as assistants or pupil teachers in such trade classes, and their training may be continued by further preparation in courses in methods and practice teaching and by keeping in touch with their respective trades.

If possible the trade worker in training for vocational teaching

[1] See Bulletins, National Society for Vocational Education. No. 19; *The Selection and Training of Teachers for State Aided Industrial Schools.* No. 23; *Evening Vocational Courses for Girls and Women.*

should plan to take more than the short courses in part time or evening classes and should enter a longer course in an all-day school, where more thorough training in teaching technique may be had, and where preparation along other lines, such as technical studies related to the trade, and social studies, may be obtained.

The trade qualification may have been obtained in the industry, the teaching ability must be directed in a training school. Trade teachers should be women of personality, good health, and right habits. They should have the ability to get on with girls and people, and should understand the scheme of organization and aims of the school in which they are teaching.

*The training of teachers for continuation and evening school classes.* — Suggestions for courses to be offered in evening and continuation classes are given on pages 181 to 189. Who is to teach such classes and what training is necessary?

Women of personality are needed for evening and continuation classes, who have special ability to make their work interesting and worth while from the trade and home-making points of view.

It will be noticed that the courses suggested are:

(1) Those which deal with the home-making studies. Women trained in general household arts or preferably vocational home-making should offer this instruction as outlined fully above on pages 183 to 185.

(2) Industrial studies which are the outgrowth of home activities — certain trade specialties. These may sometimes be taught by the woman trained in Home Economics if she has had trade experience and practice or by trade specialists willing to supplement their experience with training in teaching technique. (See page 182.)

**The training of the supervisor of Home Economics.** — By the Supervisor of Home Economics is meant the one in charge of all the home economics teaching in a school or system of schools. She may have a number of assistant supervisors and teachers, or under some conditions she may have to do some teaching with few or no teachers to assist.

It is her duty to bring about the most effective organization of home economics studies possible and to see that they are presented to the pupils by the teachers according to the best modern methods, so as to attain the results and aims outlined for home economics studies in schools. She should have a knowledge of the needs of the community in order to work coöperatively with her teachers in planning the course of study most effectively. She should be ready to do her part in the many outside ways which are so often demanded, such as speaking at women's clubs, associations and teachers' meetings.

There are many special duties which fall to her in addition to the above. The equipment and buying of supplies, the supervision of lunch rooms in various schools, the selection of teachers, and meetings and conferences with them, are all features of her work. The supervisor should be prepared to teach for observation of her teachers, and should be able to base her criticism of the instruction given by her teachers on modern principles of education and pedagogy.

A person wishing to qualify for supervision of home economics studies in schools should be a person of maturity. She should have had experience in teaching these studies as well as experience in the management of a home and knowledge of its practical activities. She should be a woman of good general scholarship and in addition should have had special training in home economics studies for a period of at least two years. If she has had experience in teaching other subjects, it is an extremely valuable asset in the supervision of this field because she will understand the possibilities in correlation of studies. She should have the equivalent of a Bachelor of Science degree. The general and special training should acquaint her with the best in modern educational theory and method, and prepare her to apply these to the field of home economics teaching. She should be familiar with the arts and sciences related to the home economics studies as well as with the technical work of this field.

In addition to special preparation and training at normal school or college, certain personal qualifications are necessary for one

seeking appointment to the position of supervision. Tact, justice, adaptability, much patience, and executive ability with high ideals, are necessary for success. Physical fitness is an absolutely necessary qualification, for such work requires untiring energy and strength. The supervisor should be a good judge of human nature and should possess the power of leadership to a high degree. Courage and spirit are necessary for success.

## SUGGESTIONS FOR STUDY AND REVIEW

1. Describe some ways in which you think you can make yourself most helpful as a teacher in your community.
2. Name some of the ways of "keeping up to date" with progress in the home economics field. Name some of the associations which should prove helpful.
3. What are you doing in the way of study in your teacher's association?
4. Write to the various departments suggested in the bibliography (page 443), and ask to have your name placed on the mailing lists.
5. What ideals should the teacher of Home Economics keep constantly before her in relation to preparation for her work?
6. What should constitute, in a general way, the best training for an all round teacher of Home Economics for the junior high school?
7. What training should a teacher have in order to teach vocational home-making most effectively in high school?
8. What should constitute the most ideal training for the teacher of industrial subjects which have grown out of home activities?
9. What are some of the duties of a home economics supervisor? How can she prepare for these?
10. What personal qualifications do you think are necessary for success as a supervisor of home economics studies?

## REFERENCES FOR COLLATERAL READING

The Teacher. Palmer.
Life of Alice Freeman Palmer. Palmer.
Life of Ellen H. Richards. Hunt.
Talks to Teachers. James.
The Art of Right Living. Richards.

Bulletin 19. Selection and Training of Teachers for State Aided Industrial Schools. National Society for Vocational Education. 140 West 42d Street, New York City.

Bulletin 23. Evening Vocational Courses for Girls and Women. National Society for Vocational Education. 140 West 42d Street, New York City.

Office of Home Economics. Department of Interior, Washington, D. C. Letters on "Duties and Qualifications of the Supervisor of Home Economics," also "Opinions on Supervision of Home Economics."

# CHAPTER XV

## UTILIZATION OF COMMUNITY INTERESTS IN THE TEACHING OF HOME ECONOMICS

I. The close interrelation of school and world interests.
   A. Value of this close interrelation to the girl.
   B. Value to the community.
II. Possibilities for interweaving school and community interests through the home economics studies.
   A. Suggestions for coöperation with community interests.
   B. Importance of discrimination in the introduction of community interests.

**Close interrelation of school and world interests.** — At no time in the history of Home Economics have there been so many vital relationships possible between the school and the community in its largest sense, as exist to-day. The alert and conscientious teacher who is eager to enlist her services to the full extent should consider these relationships in order that she may utilize as many of them as possible, both to the advantage of her classes and to the enrichment of the community.

The promotion of democratic ideals is as surely a feature of life within school as in the world at large. Only through actual participation in the life about them which has become so universal that it has no boundaries, can the girls and boys in our schools to-day learn to do the work which will be theirs in later years.

What of " higher life " and political ideals can be taught without contact? How can each individual gain power for leadership unless opportunities for leadership are offered? The printed page and the laboratory experiment are valuable to-day only as they serve as a means of solving problems which are interesting because they are a part of the great life purpose of the universe.

The teacher of Home Economics is unusually blessed in the many relationships which exist between her subject and the life about her. As surely as the demand for Home Economics as a school subject came from the community, just so surely must it meet the needs of the community in the service which it renders. Just as the mayor and the board of aldermen, the board of education, and the coroner are public servants, so the teacher of Home Economics must serve her community to the full extent of her power both in the education of girls and older women and mothers in the science and art of maintaining that institution which has been called the "bulwark of the nation"; and in promoting conservation of food, clothing, health, strength, and all commodities for which women and girls are in any way responsible. Furthermore, her influence should reach beyond the pale of femininity. It is significant that men and boys are often found to comprise a large percentage of the audience in a lecture, demonstration, or exhibit on home problems. The circumstances which have extended woman's sphere of usefulness into the "larger home" have forced men into a realization of their share in the management of their own homes; and they recognize the fact that it is a subject worthy of serious consideration.

The part played by the war in strengthening the relationships between home economics education and the home is easily recognized. It has thrown the searchlight of necessity upon the management of the home, and has demanded the elimination of all waste. It enlisted women in all lines of war service, both volunteer and remunerative, thus necessitating the reduction of housekeeping to the minimum that could be maintained without loss of family morale and physical health and strength.

In order to meet her new responsibilities this woman must be trained, to an extent never before attempted. The use of women's time in outside activities demands a knowledge of short cuts in housekeeping processes. Conservation through the repair and renovation of garments demands education along these lines. It has been said that "in these times a fashion expert is any woman who can get two or more season's wear out of one gown."

High prices of food and other household commodities demand an intelligent understanding of the economics of food and textiles.

The teacher of Home Economics worthy of the name must not only establish these relationships for the girls in her classes during the school day, but she must enlist in the great army of men and women who are giving freely of their time and energy to the service of the world.

*Value of this close interrelation to the girl.* — The spirit of restlessness which spread throughout the civilian population indicative of the desire to be in the thick of the fight, made its imprint upon the student body of elementary, high school, and advanced institutions of learning. In order to recover the educational status and to render it effective in the light of the new conditions something must be done to the school. Something has been done, — but it must continue to be done, and must be done more effectively; and it must "ring true" to the call for service. The school must, through its activities, serve the new needs of community, nation, and world in peace as it did in war times. Expression, service, coöperation, participation, "deeds, not words," must characterize the school which would succeed in maintaining the interest of girl and boy.

At no future time will the teacher of Home Economics return to the dilettante efforts which characterized her earlier work. The woman of to-morrow must face and solve problems which will grow out of the conditions which the girl of to-day is experiencing. Her vision and power will be more and more a necessity, and the girl in our classes through her participation in present-day activities is receiving the best possible education for future needs as well as serving in the present crisis.

In the report of the Committee on Social Studies of the Commission on the Reorganization of Secondary Education of the National Education Association [1] the following statement is made:

> The high school course has heretofore been determined too largely by supposed future needs, and too little by present needs and past experience.

[1] Bulletin 1916, No. 28, Department of the Interior, Bureau of Education. *The Social Studies in Secondary Education.*

The important fact is not that the pupil is getting ready to live, but that he is living, and in immediate need of such mental and social nourishment and training as will enable him to adjust himself to his present social environment and conditions. By the very processes of present growth he will make the best possible provision for the future.

In place of the opportunities for service brought by the war, there are many phases of community need which should enrich the girl's training. Whereas in earlier days, projects in Home Economics were almost universally selected from the girl's immediate need or those of her home group, to-day the crying need of the larger family group of the community calls for the coöperation of our classes, and families under charity organization care are benefited; day nurseries, old peoples' homes, and hospitals receive help as a part of the regular class work in Home Economics.

In *Our Schools in War Time and After* Dr. Arthur D. Dean thus defines the situation: [1]

The progressive teacher of domestic arts no longer thinks of catering merely to the personal decorative sense of young girls. She no longer has the girls spend the entire year making graduation dresses, or dish towels, caps and aprons. She thinks in terms of quantity and in terms of social service which the domestic arts work may render. She discovers that a hospital needs towels, aprons, caps, and bed linen, or that the orphan asylum near the school is sorely in need of children's garments and then she tells of this need to the girls in her charge, and the latter take up the problem in the same way that the boys take up the problem of building a garage. Each girl works in conjunction with others for a common purpose which all recognize as worth while.

We may go still further, and arrange for the girls or committees appointed from their classes to determine, through personal interview, the needs of the various institutions and decide upon the plan of action. Thus will initiative and foresight be developed in these girls who will be the women of to-morrow, called upon to assume the responsibilities of reconstruction work which always follow in the wake of war.

In the work in food preparation a great advantage to the girls in the coöperation with community interests is the opportunity

[1] *Our Schools in War Time and After*. By Arthur D. Dean. Ginn and Company.

offered for the use of family quantities. The day nursery and the children's home will be glad to utilize custards or cup cakes for the luncheon or supper, providing arrangements are made in advance. This, by the way, is an important consideration in the day of food conservation. Although each girl should taste her product in order to judge of its success, too often food materials have been consumed in quantities not needed by the girls.

Another advantage to the girl in the utilization of community and world interests, is the appreciation and understanding which result. It is only through close contact that the full measure of sympathy with life in its many phases can be developed. The reports of the sufferings of Belgian, French, and Armenian babies were more keenly sensed by the girls who made layettes for them; and interest requires no stimulus in the class who adopts an orphan for support, and provides an outfit for her. This was evidenced recently by the collection of twenty-five cents taken immediately by the girls in a class in a poor section of New York City, whose teacher was presenting the problem of the making of pinafores for little French boys. After a visit to a prosperous old peoples' home, for the purpose of giving them jellies and jams which were not really needed, and Thanksgiving cheer which *was* needed, one young girl remarked, " It just seems as though I *must* have a grandmother ! "

If the visits to factories, bakeries, dairies, markets, and other institutions are made the basis for a study of occupational conditions, as well as for a study of processes involved in the production of commodities, there will be an early understanding and appreciation of the Consumers' League, the Committee on Child Labor, Pure Food Legislation. For the girl who must later share in the passage of legislation which spells progress for all the members of her larger family and more ideal conditions in the larger home, and who will be called upon to share in the direction of the affairs of municipal housekeeping and the expenditure of public moneys, such training as this is surely as important as the knowledge and skill necessary for the preparation of a meal and the creation of a costume.

*Value to the community in the utilization of the interest and power of the girl.* — If there has been a lack of confidence in the ability of school girls to produce articles acceptable in finish, the phenomenal results of the past two years must have dispelled doubts. The evidence of the new faith lies in the fact that the schools have been overwhelmed with quotas of work assigned to them by the various organizations which are serving the world needs.

A very important by-product of the extensive service thus rendered by the school to the community and world cause is the unification of interest and purpose of all members of the group. Respect for the powers as well as the rights of all is bound to result in an improved social order; and only through such opportunities for service can the community come into a full appreciation of the powers of youth.

As a result of the phenomenal opportunities for service brought about by the war, Home Economics as a school subject is assured of its place in the school curriculum, providing the teacher has been alert in relating to home and outside demands. No further argument is necessary. No means of educational propaganda is more valuable than accomplishment.

**Possibilities for interweaving school and community interests through the home economics studies.** — Every teacher should survey her own community in order to determine which interests she may wisely utilize in her class work. In addition to a survey of her immediate community, the teacher of Home Economics should learn of organizations connected with world interests with which her girls may coöperate. It is urged that in so far as possible the plan of action be determined by the girls themselves, under the guidance of the teacher.

*Suggestions for coöperation with community interests.* — It must not be supposed that community and world service will supplant entirely the former use of more personal projects in the teaching of Home Economics. This would be unwise, for it would leave out of account the girlish instincts for beauty of dress and home furnishings, and home interests and activities. Furthermore, it

would be difficult to give the proper value to the home activities if only the community and world interests were utilized. Girls should be taught that in order to save time for community service, and to provide physical health in individuals for the accomplishment of such service, training in the work of the home is fundamental. One progressive teacher conceived the idea of providing afternoon care for the children of women who wished to enlist in the war service of the community, and who found it difficult to secure children's nurses.

The following concrete suggestions for utilizing existing interests to the advantage of the girls and the community may be helpful. It should be borne in mind that the education of the community as well as the girls is an important feature of all teaching in Home Economics.

1. In order to secure opportunities for using family quantities in food preparation, classes in Home Economics may provide either one or more dishes for *church suppers* or *meals served by other organizations;* or the class in Home Economics may assume the responsibility of serving such meals either in the school or in other kitchens.

2. *The school lunch room* is a very important field of service, both for its value as a field for practical experience in the actual handling of food and business management, and as a means of educating all the pupils and teachers in the school and through them their families, in food conservation measures. This is true in communities of foreign families when education in the use of American foods and customs is necessary. Furthermore, the "gospel of the clean plate" was preached very effectively throughout the country in school lunch rooms patronized by the children from the native American home, especially the home where abundance has made such teaching necessary.

The poster and slogan, attractively designed and lettered, have been found very potent in educating pupils in the lunch room. Poster contests may be conducted by the art department. The teacher of Home Economics as well as the older girls should exert tactful influence in helping the younger pupils to select wise com-

binations of food, and to consume all of the food they order. The collection of food left on the plates and a conspicuous exhibit of the accumulation, with appropriate statement, has proved very effective in the elimination of waste. An occasional assembly on the fundamental points in conservation of food, clothing, fuel, and other commodities may be conducted by home economics girls.

3. Both the work in food preparation and the making of garments and household furnishings may be given a new vigor if done for one of the community institutions, such as the *homes for the aged, orphans, or the indigent.* In the absence of a practice house, and under the present scarcity of labor, occasional service in housewifery may be rendered to such institutions.

4. *Day nurseries* present excellent opportunities for teaching the care and feeding of children. Just as the former sampler work in sewing and the one biscuit stage in cooking have become ridiculous in the light of present need, so the preparation of babies' food for an imaginary child, and the bathing and dressing of a large-sized doll seem ludicrous in this day and age of countless orphans due to war and disease.

5. Many teachers of Home Economics are using the girls in their classes as assistants in the work of *demonstrating food and clothing problems.* Furthermore, the regular class work in foods should be planned with the idea of solving problems for the community in the adaptation of recipes to meet the demands for thrift.

6. Coöperation with the government in the *survey of markets and family dietaries* is possible with girls of senior high school age.

7. *Publicity work* through the local newspaper provides excellent work for the girls in home economics classes to carry on under the direction of the English teacher.

8. The *community canning kitchen* offers opportunity for service and excellent training in food preservation.

9. An exchange of services between the nurse in a *hospital* and the teacher of Home Economics will provide expert training in home nursing and first aid for the school girls, and a course in dietetics for the nurses in the hospital. In lieu of a real bedroom

in the school, the girls may be taught bed-making, the care of the bedroom, and the daily care of the invalid's room in a hospital. Such an acquaintance with hospital conditions will tend to encourage enlistment in the nursing profession.

10. As a service parallel to that of the farmerettes, girls of elementary and high school age may serve as assistants to farmers' wives, especially during the summer months, when the need is greatest. This service is strongly urged by Dean Russell, of Teachers College, who says that, with all due respect to the farmer in his burdens, the farmer's wife is the most heavily burdened individual on the farm. Such work may be given school credit, in the same way that students of agriculture must serve during the vacation in actual farm experience.

11. Service in the girl's own home, or a home where she may be helpful, should become a part of her regular training. One girl in the elementary school, after a lesson in cleaning, reported that she had cleaned the store of the shoemaker in her community.

12. As a means of developing interest in social service, coöperation with the charity organization of the community is urged. The needs of specific families, in relation to food and clothing, may be determined and relieved by the home economics classes.

One school provides a special community service by selecting a needy family for each grade in the school. The class assumes the responsibility, for example, of supplying the milk for their family, or providing necessary garments for the children, or perchance sharing monthly in the expense of rent.

In the case of senior high school girls, family visiting with the charity organization visitor is helpful. Budget study is made vital through such services. A knowledge of the Home Service Work of the American Red Cross, and some small part in it, if possible, is excellent training for similar work in maturer years.

13. The *repair of house furnishings* is surely a practical service. The repair of furniture, table linen and bedding, the process which will prolong the life of any article; the utilization of every scrap of material in order to eliminate the purchase of new, — all this is in accord with the present need for wise economy.

14. It may devolve upon the teacher of Home Economics to promote *school and home garden activities*. Unless there is some one else who is specially qualified to handle this work, she should assume the task. The complete utilization of the produce will certainly be one phase of work for home economics classes. A private school of excellent standards conducted on an estate bordering on the Hudson River offers Home Economics in its curriculum. A young girl of 15, a member of the family owning the estate, has assumed the responsibility of preserving for use in the school lunch room all surplus fruit of the estate. This has amounted during the past summer to about 150 jars of fruit.

15. As complete coöperation as possible with the *American Red Cross work* both through Junior Red Cross membership and coöperation with the local auxiliary of the main organization should be provided for in the present-day course in Home Economics. This will demand more time, perhaps, than the school program will allow. In this case, some extra time should be planned for. Cooperation of the mothers and girls in a work room in the school will strengthen the work and will result in a real community war service. This phase of work cannot be overemphasized as an essential part of home economics teaching. In addition to 100 per cent membership, there should be 100 per cent spirit for Red Cross service in whatever phases of work may be assigned by the local auxiliary. There is work for boys as well as girls, and provision should be made for it.

16. The *renovation* and *repair of clothing* donated for distribution by relief organizations may be carried on by the girls in the home economics classes. Dyeing, cleansing, mending of all kinds, laundering, retrimming of hats, the making of simple accessories, such as collars and cuffs and hat trimmings, — all these may be taught as concrete methods in the conservation of clothing.

17. The home economics department may become a distributing agency for government bulletins. The public library or the town hall or the school corridors may be utilized as distributing centers. A scheme should be devised to avoid wastage of this material.

18. Coöperation with various committees for the relief of suffer-

ing among the children of the stricken countries of Europe, for example, the Franco-American Committee for the Protection of Children of the Frontier, 680 Fifth Avenue, New York City; the Fatherless Children of France, 665 Fifth Avenue, New York City; and the Committee for Armenian Relief, 1 Madison Avenue, New York City; is a service which every class in Home Economics can forward, both by personal service in the making of garments and by the publicity work which will result from such service. It has been found very stimulating to the interest of girls in such work to provide for the adoption of a "god child" by the school or the class, and also by individual girls or families, through such committees.

The necessary funds for the maintenance of the adopted child can be secured through sales of food products, voluntary contribution, or possibly through the coöperation of families whose interest may be aroused. The personal contact which comes through correspondence with the children or their sponsors results in strength of purpose, and joy in work which is boundless in its effect.

The following series of lessons was given during the summer of 1918, as a short unit on home-making, to girls in a city school. Its prime purpose was to suggest the employment of world interests to a group of teachers of Home Economics, who observed the course. This will explain its seeming lack of continuity. Each lesson is suggestive of a series of lessons which might be developed.

GRADE VIII

Problem: We have also adopted Madeleine Jabot whose home in France has been completely destroyed. Let's pretend that Madeleine is living with us this summer. What can we tell Madeleine about homemaking that will help her to do her part in her new home?

*First Week*

Tuesday, July 9th, 11.30. Problem: What should we know about Madeleine and her problems in order to help her? (Discussion of Madeleine Jabot and her problems.)

Thursday, July 11th, 11.30. Problem: We showed Madeleine the House Palatial down town, but she says she likes ours better. I wonder why. (Ideals in Home Furnishing.)

*Second Week*

Tuesday, July 16th, 11.30. Problem: Uncle Sam says that even the children should keep accounts these days. How can we help Madeleine by keeping accounts? (Budget lesson.)

Thursday, July 18th, 11.30. Problem: We ordered our groceries by telephone the other day and the fruit was very poor and the lettuce wilted. Madeleine said, "Why don't you go to market and choose your own food?" (Marketing.)

*Third Week*

Tuesday, July 23d, 11.30. Problem: Mother says that Madeleine has a very small appetite this summer. How can we make her relish her food, so that she will be well and strong for the work ahead of her? (Planning meals.)

Thursday, July 25th, 11.30. Problem: The French are famous for their salads and salad dressings. I wonder if Madeleine can show us anything about salads. (Vegetable salad.)

*Fourth Week*

Tuesday, July 30th, 11.30. Problem: Madeleine has been accustomed to doing all of her sewing by hand. Is this wise? (Machine lesson.)

Thursday, August 1st, 11.30. Problem: Mother will not permit us to stitch on the bags for the French babies until we can stitch straight and evenly. (Machine practice on bags for French babies.)

*Fifth Week*

Tuesday, August 6th, 11.30. Problem: Madeleine has told us about the motherless babies in France. What can we teach her about bathing the baby? (Bathing the baby.)

Thursday, August 8th, 11.30. Problem: A great deal has been said about the scarcity of milk in France. How will this affect the children? (Simple meals for children.)

*Sixth Week*

Tuesday, August 13th, 11.30. Problem: Mother says that Madeleine and I can have but one new dress apiece for fall and winter. What should we know in order to choose wisely? (Line and color in dress.)

Thursday, August 15th, 11.30. Problem: One of Mother's table cloths is too worn along the table edges for further mending, but the border is still firm and good. How can we use this linen? (French hemming lesson.)

*Importance of discrimination in the introduction of community interests.* — A note of warning was sounded by one city school system which established as one of its policies regarding war work that "All war activity was to be primarily educational. This forbade multiplication of the same product by one individual once the educational value to the learner had been gained. The large number of pupils permitted the production of much material without sacrifice of educational values."

The enthusiastic teacher must guard herself from establishing so many lines of interest that her work lacks thoroughness and focus. Were every teacher to undertake to establish all the connections suggested it is needless to say that her work would be greatly weakened because of dissipation of energy. They have been offered as suggestions from which to draw, in the hope that some of them may prove feasible in the enrichment of the work in Home Economics in the schools, and as suggestive of future possibilities which will present themselves to the alert teacher.

A fundamental requirement of the present-day home economics teacher is that she be willing to modify *wisely* her plan of work to meet the needs of the community and the organizations with which she is coöperating. This does not entail the elimination of a well-organized course of study, but it does demand flexibility in the course, and a willingness to appropriate community interests even at a slight sacrifice of logical continuity of principle and processes.

Although the needs of community and world are changing with the coming of peace, there will be untold opportunities during

the reconstruction period for the teacher of Home Economics to render service; and the teaching which is closely allied to, in fact, "part and parcel of," the present world activities is the best possible preparation for effective service by the women of tomorrow.

The mantle of prophecy must have fallen upon Ruth Comfort Mitchell when she penned her poem "Barbara," which was published before America entered the conflict.

## BARBARA

By Ruth Comfort Mitchell

Barbara, child with the luminous face,
If you had lived in the daintier days,
With your fine, frank ladyhood look of race,
In your decorous cap and sober grace,
Delicate bards would have penned your praise,

Tenderly sung, with a sheltering smile,
Of your "starry gaze" and your "brow of snow,"
And prayed there should never a breath defile
From a world without that is sad and vile;
"Pure" and "secure" would have rhymed, I know.

But, Barbara, this is a sterner age.
We shall ask for your hands to help and heal;
We shall call you soon in the war we wage;
We shall want your tears and your high, white rage,
Your slim, strong shoulder against the wheel.

They'd have set your beauty within a bower;
But we cannot spare you, we need you so.
You are vital force; you are not a flower.
You are challenge and promise, peace and power —
Your starry gaze and your brow of snow.

## SUGGESTIONS FOR STUDY AND REVIEW

1. In the light of present-day developments, tabulate the community and world interests to which the teacher of Home Economics may wisely relate her work as a basis for the later response of the girl to the demands of society.

2. Illustrate instances in your own girlhood experience which have strengthened you for community service.

3. Justify the material of the foregoing chapter in the light of present educational ideals.

4. In what way could a teacher in a one-room rural school carry out any suggestions made in this chapter? Make other suggestions for her work along this line.

5. Suggest possible opportunities for coöperation between the home economics teacher and community interests in your home locality.

## REFERENCES FOR COLLATERAL READINGS

Our Schools in War Time and After. Dean.
The Social Studies in Secondary Education. Bulletin 1916, No. 28. Department of the Interior, Bureau of Education.
The Literary Digest.
The Survey.
The Education of To-morrow. Weeks.
Schools of To-morrow. Dewey.
Problems of Educational Readjustment. Snedden.

## CHAPTER XVI

## EQUIPMENT FOR TEACHING HOME ECONOMICS

I. General discussion of equipment for teaching Home Economics.
   A. The relation of the type of equipment to the aim and purpose of the work.
   B. Various schemes of arrangement.
   C. Equipment for teaching Home Economics in organizations other than schools.
II. Various types of school equipment.
   A. For teaching textiles and clothing.
   B. For teaching the preparation and serving of foods.
   C. For teaching laundering and housewifery.
   D. For teaching the care of children.
   E. For teaching home nursing and personal hygiene.
III. Charts, exhibits, and other illustrative material.
   A. Importance of wise choice and effective use.
IV. Suggested lists of equipment.

**General discussion of equipment for teaching Home Economics.** — It has been said that a poor workman is inclined to hold his tools responsible for his inefficiency. Be that as it may, the equipment for teaching Home Economics should be chosen with extreme care and consideration as to its suitability to the work to be accomplished, if the home economics studies are to be most effective.

Home Economics may be installed in a school system with very meager equipment at the outset, providing it is the only possible entering wedge for the subject. The theory of the subject may be made a school study with simple demonstrations when possible, and the working out of the principles carried on in the homes, either individually in the girl's own home, or in groups in the homes of various women of the community who are specially adept in various phases of home activities. The disadvantage of such a scheme is obvious — it does not provide for the expert criticism and dis-

cussion and comparison of results which should characterize the practical work in the teaching of Home Economics. Furthermore, the application of the principle taught is more or less remote in point of time, and hence it is difficult to accomplish the most satisfactory results in view of modern educational demands.

Another method is to offer only such phases of the subject at the outset as can be taught with no equipment, or with equipment which may be borrowed from some willing housekeeper. Many phases of hygiene and sanitation in the home and community; the theory of food values; the physical care of children; household accounts; textile study; costume and household art design; home ideals; — these are suggestive of phases of Home Economics which may be taught with little or no equipment.[1]

However, these methods of presenting the subject are described only as a means of introducing it, when funds are not available. It should be put upon a sounder basis as soon as possible.

Perhaps no other school subject offers a greater variety in types of equipment than Home Economics. From the one-room rural school with its very simple equipment sufficient to prepare the hot luncheon and to keep the schoolroom clean and attractive, to the fully equipped technical high school there are many grades of equipment. Success in the use of all types lies in the ability of the teacher, for the laboratory supplied with the most elaborate equipment will prove valueless in the hands of the teacher who fails to relate her work to the lives of the pupils; and the inspired rural school teacher with limited equipment may be a real power for improving home and community conditions.

In determining the type of equipment to select for the work to be offered it is necessary to consider the following questions:

1. What funds are available for expenditure?
2. What is the aim of the work in Home Economics (*e.g.* general education, preparation for home-making, technical training in vocations related to the home, or a combination of these)?

[1] For further information see *Education for the Home*, Part I. United States Bureau of Education, Bulletin 1914, No. 36, whole No. 610, pp. 35–37, also Bulletin, 1914, No. 37, whole No. 611, p. 110.

3. From what types of homes do the pupils come?

4. What opportunities are offered for the utilization of products in both textile and food work?

5. To what extent will coöperation with other sciences and social studies be possible? (It is unwise to duplicate chemical and physical apparatus, and maps, charts, etc., in the scientific and social phases of the subject.)

Whenever possible, it is desirable that the purchase of equipment, in so far as it is typical of the home, should be utilized as part of the girls' training. For example, the selection of kitchen utensils, china, linen, curtains, silver, dining-room furniture, sewing machines, laundry equipment, may well be taken as a part of the girl's training in Home Economics. If this cannot be done at first hand, in actual shopping expeditions, it may be done either by committees chosen from the class, or from catalogues and samples. The hemming and marking of linen and the making of curtains should be handled as class work.

*The relation of the type of equipment to the aim and purpose of the work.* — Although it is *possible* to use the same type of equipment in presenting Home Economics in its various phases as suggested in 2 above, it should be adapted to its specific use.

The distinction may be made between the equipment which is designed for general education and vocational home-making, and the equipment which is designed to prepare students for vocations growing out of Home Economics, such as catering, lunch room work, dressmaking, millinery, etc.

The best modern methods in the teaching of Home Economics for general education demand at least a combination of the school-room equipment, and the more truly home environment, such as the "unit kitchen," which will be described later. The ingenious teacher whose domain is limited to one or two rooms for all the work in Home Economics will utilize whatever equipment is available in the school for the teaching of Home Economics, such as the teacher's rest room, and the principal's office for the teaching of house furnishing, care of bedroom, cleaning, etc.; the lavatory and toilet for the teaching of the care of the bathroom; the equip-

ment of her own laboratories for the care of kitchen, dining room and laundry. Fortunate indeed is the teacher who can arrange for alternating groups of girls to prepare family-sized quantities in the lunch room, and assist in the service of the same. Although the school lunch room may be a huge one, the experience gained there from time to time makes for efficiency in the girls in meeting their home problems.

There is no virtue in the super-optimistic teacher who " winks her eye " at the inconveniences and lack of sufficient equipment *providing* there are available funds for the improvement of conditions. Many present-day teachers are improving both the work of their classes and the equipment for work by conducting sales and school lunches.

For the teaching of technical work in foods and clothing it is essential that the equipment, the surroundings, and the length of the school day approximate as nearly as possible the conditions as they will be found in the vocation for which the girl is being trained, eliminating the undesirable features. Furthermore, the school training should be supplemented by practice in the commercial establishment, either as part time work or as opportunities provided for summer vacation experience. Needless to say, the teacher of Home Economics should have had experience in the vocation for which she is training girls.

*Various schemes of arrangement.* — The subject of Home Economics offers a wide range of choice in the selection and arrangement of equipment. There are many controlling factors, as has already been said. The various types of arrangement may be classified in a general way, as follows:

1. The classroom equipment as in the one-room school and the school with no room set apart for home economics work.
2. The school laboratories for teaching the work in foods and clothing.
3. The " unit kitchen " scheme.
4. The practice house.
5. The laboratory for technical training.

In considering the advantages and disadvantages of each scheme

of arrangement it will be well first to discuss the essential features of each.

The equipment for teaching Home Economics in the rural school has been discussed in detail in Part II, Chapter VIII, "Home Economics in the Rural School." The simplicity of such equipment renders it possible to teach the elements of Home Economics in every rural school; and the intimacy of the subject with the other subjects in the school program provides for close correlation.

In many school systems, the work in sewing has been the first phase introduced, because it may be more easily taught in the regular classroom than the preparation of foods, and because the initial expense is small. Phases of home sanitation and management, the theory of food values, and even some work in cooking can be taught in the regular classroom; but to be most successful, the subject should have its own equipment in a school when space can be provided.

1. School laboratories for teaching the work in foods and clothing. — Up to within a few years the only approved method of equipping rooms for Home Economics was in the form of a laboratory for individual work. Earlier in the history of the subject, in the teaching of "cooking" the "group scheme" was common, whereby girls worked in twos, threes, or fours; or the class observed a group of two, three or four, after participation in the discussion of the process. While this scheme had the one advantage of economy in equipment and materials, and doubtless made the development of the subject possible, it had the extreme disadvantage of reducing each girl's experience in the practical work to a minimum.

Parallel to this effort toward economy in the use of food products and equipment, the subject of "sewing" was taught with a minimum of equipment and materials by the making of "samplers," the only equipment necessary being needle, thread, thimble, scissors, and scraps of cloth.

However, with all due respect to these early methods, it is evident that neither scheme offered opportunity for the training of the girl for life activities.

The introduction of the special rooms fitted up for teaching foods and clothing was a decided step forward. In some cases, where classes are not large, one laboratory has been fitted up to meet the needs of all phases of the subject, — one half of the room equipped for individual work in the teaching of foods, the other half for dining room service and the work in sewing. By means of screens, a temporary division may be provided.

In equipping two or more rooms for the work in Home Economics, it is wise to select a room with the northern exposure, if possible, for the work in clothing, because of its diffused light.

In the equipment of the home economics laboratories it is highly important that provision be made for the storage of supplies and utensils. In drawing the plans of a school building, such closet and cupboard space should be designated; however, in the adaptation of former classrooms to the new subject, it is sometimes impossible to provide separate closets, while cupboard space may be provided by building in cabinets. In planning for such storage space it is very important that the size of utensils and other equipment to be stored be considered; and that provision be made for the care of illustrative material. As a matter of economy of effort and nerve-strain on the part of pupils and teacher, it is urged that utensils and tools which are used infrequently, be kept in storage closets rather than in the individual table and drawer equipment.

In the case of the teacher who handles all phases of Home Economics, it is especially important that she have a central office or at least a desk, where she may keep all records. Such a desk should be so placed that it is easily accessible to both laboratories, and if possible, to the storage closets. If careful routing of the home kitchen is important, it surely is in the school laboratories.

There are various schemes for the arrangement of the laboratories for teaching food and clothing; but these will be discussed in the next section of this chapter. Suffice it to say at this point that even though the food laboratory is equipped for individual work, provision should be made for equipment which may be used in the working out of family-sized recipes. The single muffin and cupcake are "under the ban"; the present-day teacher of food

preparation must contrive a scheme for the use of larger recipes and the utilization of the products. The utilization of products in the school lunch room offers a valuable opportunity.

2. The unit kitchen scheme. — As an approach toward the installation of home conditions in the school, the unit kitchen has been found very satisfactory for the teaching of food preparation. A combination of the laboratory for individual work and the unit kitchen has proved satisfactory in that it offers occasional opportunity for experience in a home kitchen as an alternative with the work at the laboratory table.

In a letter concerning the unit kitchen, Mrs. Iris Prouty O'Leary, then special assistant for Vocational Education of the Department of Public Instruction, Trenton, N. J., wrote in November, 1916:

I might well add that I am not advocating any standard equipment to be called a "unit kitchen." My point is this: if the schools are going to do a real job, they must have real things to work with; they must go to the "industry" and copy the "machinery which is used in productive work." In this case the real thing is a kitchen in an ordinary home. The school ought to reproduce this kitchen, make it a little better, if it can. . . . For very obvious reasons all schools cannot put in a sufficient number of actual kitchens to accommodate large classes. The unit kitchen idea would be to devise the best arrangement possible under any given conditions. This arrangement ought to at least reproduce the essential features of a home kitchen.

In her bulletin "Cooking in the Vocational School as Training for Home-making,"[1] Mrs. O'Leary thus describes the unit kitchen:

In the "unit" kitchen has been found a method which approaches the requirements of giving actual training under home conditions. By this method the home kitchen is made the unit of construction, the units being repeated as often as the number of pupils demands. These kitchens are small rooms like the ordinary home kitchen, and are furnished with sink, gas stove, and the necessary utensils. The equipment should be simple, planned to put the girl on working terms with the kitchen at home. The rooms are built with only three walls, the fourth side being open on the hall. By this arrangement one instructor can supervise the work in a number of kitchens. A class of 15 can be taken care of, each kitchen accommodating 5 girls, as in the New Bedford Industrial School, New Bedford, Mass., or in the Boardman Apprentice Shops, New Haven, Conn.

[1] United States Bureau of Education. Bulletin, 1915, No. 1, whole No. 625, 5 cents.

In place of walls, iron tubing has been found satisfactory as indicating a wall, yet allowing of more constant supervision of all groups of girls than is possible with the separate kitchens. This is especially desirable with the girls of elementary school and junior high school age.

This is a more expensive type of equipment than that of the ordinary school laboratory; but its increased advantages, at least in combination as described above, may be readily seen.

In case laboratory equipment is already installed, the unit idea may be introduced by fitting up one corner of the room as a home kitchen, the girls alternating in its use.

Another form of the home kitchen is the use of the unit scheme in equipping for individual work, two girls working opposite each other at the same table, each with her own utensils, but sharing the stove and cupboard.

In order to provide various types of kitchen, one progressive supervisor has installed four unit kitchens in one school, each furnished with equipment of different cost. By assigning the girls to the various kitchens in progression, all may become familiar with each type of equipment. This scheme provides for the normal home environment of each girl, and also introduces her to the type of kitchen which she may find in the homes of others.

3. The practice house. — As a result of the present emphasis upon vocational home-making, the practice house has become almost a necessity in the teaching of Home Economics. Furthermore, with the present demands for conditions which are true to life, it is essential that the girls be given opportunity for actual work in a house such as they themselves live in.

In "Education for the Home," Part I,[1] Dr. Benjamin R. Andrews makes the following statement:

> Viewed educationally, household arts will only be taught adequately when a real practice field is provided for all phases of housework with the responsibility that belongs to a real living situation. It has therefore been urged that in urban communities at least, housekeeping centers must be organized as an integral part of the public-school system in which selected

[1] United States Bureau of Education. Bulletin, 1914, No. 36, whole No. 610.

groups of girls shall live for a week or more to perform personally and in due course all the duties of the housekeeper. Certainly any adequate training must include real practice, either in the children's own homes or in such practice homes as have been described.

It is difficult to secure a normal home environment in the school practice house, for very obvious reasons. The family is missing in many cases, and hence the cleaning is not inspired by actual need. If a family is provided for, it is apt to consist of a "made to order" group, lacking both children and father of the normal family. In many cases, the only available space is within the walls of the school building, possibly a large unused schoolroom converted into an apartment for the purpose of teaching home activities.

However, any attempt to install an actual home environment as a setting for the teaching of Home Economics is a worthy one; and even the formal suite of rooms set down within the school building, uninhabited by any family, is a decided step in advance. In most school systems, it is necessary to establish laboratories for individual work in food and for work in clothing, in addition to the practice house; unless the classes are not too large to use the living or dining room as sewing laboratories and the kitchen of the practice house for class work in foods.

One great advantage to the school in the establishment of a practice house is that it gives a home environment for the social affairs of the school. When it can be thus utilized, a great step in advance has been taken toward unifying home and school; and the teacher of Home Economics and her classes will become strong factors in making the school reception, the parent-teachers' meetings, teachers' meetings, and faculty teas, less stilted affairs than they have been in many cases.

It is the purpose of this chapter to consider the various plans for establishing practice houses in connection with elementary and high schools. The normal school and college, and the preparatory school which is a resident institution, have a very different problem; for the girls in attendance at such schools may alternate in living in the practice cottage or house, and it may thus become

a home, with conditions approximating those in the normal family group.

Furthermore, the dormitory has, in some cases, in the hands of an ingenious and adaptable teacher of Home Economics, proved a very satisfactory form of practice house in so far as the teaching of the daily home activities is concerned. The care of the girl's bedrooms, the cleaning of the various rooms in the house, and the preparation of occasional meals, if the family is not too large, give excellent opportunity for practical work. The "Home Life Schools" of the South offer opportunities for teaching of this sort.

In the New York Orphanage at Hastings-on-Hudson, the cottage system, each cottage housing about twenty children, gives excellent opportunity for utilizing the children's own home for the teaching of home activities.

(*a*) The practice house within the school building. There are two conditions under which this type of practice house may be established, — first, the transformation of a schoolroom or other section of school building in creating a suite of rooms; and second, the building of the practice apartment into the new school building.

The advantage in having the practice house within the school building is that the children are more directly under the supervision of the school than when they go out into the neighborhood for their class work. The disadvantage is obvious, — it is practically impossible to create within the school building a feeling for a suite of rooms which makes it approximate a home; it is still a laboratory or schoolroom.

In transforming a schoolroom into a practice house, the question of light must be considered. Usually the room has light on one or two sides only. A plan which has worked out rather well has been the use of heavy Bristol board as walls, only about seven feet high, thus allowing the light from the outer windows to enter the rooms from above and through the windows cut in the walls. By providing a living room, dining room, bedroom, bath, and kitchen, with the essentials of furnishings for each room, a very satisfactory practice house may be established. The girls should be given every opportunity for the selection and making of furnishings, —

selection of furniture, china, kitchen utensils, household linens, etc.; and the furnishings should be purchased with a possibility of sale later in order that incoming classes may have similar experience.

In the equipment of the kitchen occasionally it has been found wise to provide for individual laboratory work. This reduces the home atmosphere, but it also obviates the need of a separate laboratory. When classes are not too large, this is a possibility.

It should be borne in mind in drawing up plans for the practice house which is to be built into the new building that it should approximate the home conditions of the girls. In order to increase its homelikeness, it should be used by the school for all events where hospitality plays a part. The wise teacher of Home Economics will weave into her scheme of work all opportunities for serving meals, teas, etc., which offer themselves (unless they exceed in number and complexity the work which she believes her classes should be called upon to do).

In case the teachers live in rooms provided for them in the school building these rooms may be utilized in teaching the care of the home; but for obvious reasons the extent of their use is limited.

(*b*) The practice house outside the school building. This has proved more satisfactory in many ways than the practice house which is established within the walls of the school. It may be a cottage, bungalow, or house built upon the school grounds, or a house in the neighborhood either owned or rented by the school authorities, or an apartment in the community. As has been said, "Conditions and equipment should be such as children have at home and should offer incentive to the bettering of home conditions. . . . The children should not be educated above the home, though the homes may well be elevated."

As was suggested earlier in this section, plans may be developed for the girls of high school classes to live for a limited time in the house under the direction of the teacher of Home Economics or some one else employed for this service; but at all events they should be given every opportunity possible to carry on home activities under the careful direction of a supervisor.

In the case of large classes, one teacher may take a part of the class in the laboratories for work in sewing, cooking, or other phases of work, while the rest of the class may be taught in the practice house by another teacher. In cases of this kind it is desirable to have the same teacher handle a class in both laboratory and practice house in order to maintain the home idea throughout her teaching.

The "teacherage" which has been widely introduced through many rural districts offers opportunity for teaching home activities under normal home conditions.

4. The laboratory for technical training. — For vocational training in foods and clothing, such as lunch room work, catering, dressmaking, millinery, etc., the laboratory should represent the commercial work shop, and the school day should lengthen into the work day which the girl will find when she leaves school.

Equipment must be selected with a view to approximating that which the girl will handle as she goes into the field. The equipment for teaching Home Economics for general education will be inadequate for training the girl to handle large quantities of food, or for commercial dressmaking or millinery; and the reverse is equally true.

The school lunch room offers an excellent laboratory for training in large quantity cooking; and the serving in the teachers' and pupils' lunch rooms affords excellent practice. Catering for large school affairs and an order for community needs may be carried on in the same laboratory.

*Equipment for teaching Home Economics in organizations other than schools.* — In discussing the equipment for teaching Home Economics, an effort has been made to indicate the various types, both the very simple and the more complete. In all cases, the organized school has been kept in mind; however, the teacher who will handle classes under organizations other than schools can readily adapt the suggestions to her own problem. For example, the teacher of camp cookery, as one phase of the work of the Girl Scouts and Camp Fire Girls, will select equipment which can be used on camping expeditions; however, she will also have need for

home equipment, and in many cases this teaching will be done in the girls' homes or in the school which the girls attend, possibly as a part of their regular school course.

The Y. W. C. A. classes will demand the same type of equipment which the school has, for the work is similar in its essentials. In many communities, coöperation between school and Y. W. C. A. will provide for utilization of the same equipment for both. In some cases, where technical training in dietetics is offered by the Y. W. C. A. a special laboratory is necessary. Such an equipment should include scientific apparatus in addition to the utensils needed for the preparation and service of the dietaries planned.

Church schools, girls' club work, and social centers have much the same needs as the elementary and junior high school; although in many cases the funds available for equipment are even more limited. In such cases, it may be possible to utilize the kitchen in the parish or guild house, or in the chapel which serves the needs of the women's organizations or the home kitchen in the resident social center; and the various assembly, club rooms, and Sunday School classrooms for other phases of home activities, such as the work in sewing, housewifery, etc.

When the work of the church school and the girls' club is carried on in a congested community care should be taken that the school equipment should not be so remote from the homes that the relationship is lost. In such cases an apartment suitably furnished should surely be a part of the equipment.

**Various types of school equipment.** — For the teaching of Home Economics for general education, the equipment suitable for teaching in the elementary and high school will vary little excepting in so far as the available funds make it possible to elaborate the equipment for the use of the more advanced classes. Even in the event of a generous outlay, the teacher should select her equipment with an eye to the definite use of each piece, and should aim to secure only such furnishings as will prove essential to the best results.

It is wise to secure catalogues from reliable firms which handle equipment for teaching Home Economics and to examine care-

fully the merits of the various types before purchasing. It is especially important that a teacher of Home Economics, preferably the one who is to use the equipment, plan for the arrangement of laboratories and the selection of furnishings. Many and grievous have been the errors made by architects, builders, and school directors who have undertaken to equip home economics laboratories without the advice of the woman of training and experience.

*Equipment for teaching textiles and clothing.* — Although it is by all means desirable to have a room set aside for teaching the work in textiles and clothing, it may be taught in a regular classroom, if necessary. In this case large table tops for cutting may be placed over the desks, and the usual seats used in place of chairs. It is usually possible to place a sewing machine in the classroom, and this would, of course, be essential. This scheme should only serve as an emergency, however; for it is not conducive to the most successful work.

In planning the laboratory for this phase of home economics work, it is sometimes necessary to combine the sewing and the table service work. In this case, care should be taken not to sacrifice one to the other, but to secure furniture which will meet the needs of both. If a dining room table is purchased, it will be necessary to secure an adjustable top which will protect it from the marking incident to the use of scissors, pins, and tracing wheels. Furthermore, the greatest care must be exercised in keeping the furniture clean in order that the materials used in sewing may be kept immaculate.

In selecting work tables and chairs for use in the sewing laboratory, it is well to select those which are low enough for comfort; and the table should be supplied with a foot rest. It is desirable to have tables for two or four pupils, rather than the larger table.

When possible, sewing machines of different types should be found in the high school laboratory, in order that the girls may become familiar with the various makes. A double thread machine has been found by many teachers to be most satisfactory in the elementary school.

In arranging the sewing room, it is wise to provide for the light to fall over the left shoulder, both for the work at the tables and in using the sewing machines.

As necessary equipment in the sewing room should be found a generous blackboard, a good cork bulletin board, a fitting room set off from the main room either by screens or curtains arranged on rods and full length mirrors.

If, as usually happens, the work in millinery is taught in the same room with the work in clothing, it is necessary to provide cupboard space.

In planning for the storage space for the work in clothing provision should be made for:

(1) The storage of supplies.
(2) The hanging of garments on hangers from a rod (necessitating a cupboard deep enough to receive the hanger at right angles to the door, the rod placed parallel to the wall and door).
(3) The storage of hats.
(4) The storage of equipment boxes.
(5) The storage of illustrative material.

In the school where it is impossible to have a practice house to represent the home, perhaps no room offers better opportunity for introducing the atmosphere of home than the sewing room. Suggestive of the possibilities in this respect it may be well to mention the teacher of textiles and clothing in a woman's college who is hoping to install a large open fireplace in her laboratory as the memorial of one family to a daughter of the household who was a student in the department. Surely the textile and clothing laboratory should exemplify in every detail the beauty of environment for which the department of Home Economics stands; and, unless the teacher of Home Economics is thoroughly capable of securing this harmonious setting she should call upon the art department of the school for coöperation in this task, as in the teaching of house furnishings in her class work.

*Equipment for teaching the preparation and serving of foods.* — Although it is possible to utilize the same room for both the prepara-

tion and serving of meals, it is much more desirable to have a dining-room separate from the cooking laboratory.

If necessary to combine them, one end of the room, if a long one, may be set aside for the dining room. This separation may be accomplished by the use of screens, or a rolling wall may be built in. If the laboratory is arranged with the "hollow square" scheme, as described later, and the space within the square is large enough, it may serve as the dining-room; the table, when not in use as a dining table, may be protected by a white oilcloth, and serve as a supply table.

1. The laboratory for the preparation of food. — As was stated above, the equipment for the initial work in food preparation may be very simple and inexpensive. The equipment as described in Part II, Chapter VIII, "Home Economics in the Rural School," will prove adequate for home economics work and is sufficiently economical to be possible in any school. This section will deal with laboratories specially equipped for food work.

The keynote of this laboratory should be immaculateness. In every detail, the finish of walls and floor, the tables, pantries, etc., should be capable of thorough and frequent cleansing. However, in planning for the sanitary condition of the foods laboratory the artistic must not be overlooked. Fortunately, the combination of the sanitary and the artistic is perfectly possible; in fact, the simplicity necessary in the sanitary may serve the best purpose of the artistic.

In planning the color scheme for the laboratory, the exposure should be taken into consideration. In any case, it is wise to avoid the dead white for walls and ceiling. A light buff color as a background proves satisfactory, for it harmonizes with the colors available in the commercial utensils for the kitchen, and is a restful color to live with. There should be a definite color scheme in the equipment of the kitchen, both at home and in the school. It should be determined before purchasing china, earthen, and enameled ware.

In designating the type of finish for *walls* and *ceiling*, the importance of a surface impervious to moisture and soil should be

borne in mind. Perhaps the most practical and durable finish is a good grade of paint, preferably enameled paint. The softer finish such as alabastine is considered more artistic, but is less durable. It must be replaced rather than cleansed. If the enameled paint proves too expensive for the entire wall and ceiling surface, it may be used for six or seven feet of the wall surface, a cheaper paint being used for the upper part of the walls and the ceiling. Glazed tiling is an ideal wall finish, for at least the lower part of the surface, but its price is prohibitive in the average equipment.

The selection of a *floor finish* should be made with reference to: (1) resiliency, (2) non-absorption, and (3) ease of cleaning. It should also be typical of the type of floor covering possible in the homes of the pupils.

The *floor covering* which is considered most suitable for the food laboratory is linoleum, carefully laid. An occasional coat of varnish prolongs its life. This should harmonize in color with the wall finish. Although the plain linoleum is attractive it is less practical than that which has an inconspicuous pattern because it shows every mark. Only the linoleum with the inlaid pattern is practicable.

The unglazed tile makes a very attractive floor when clean; but it soils very easily, is not resilient, has a tendency to be slippery when wet, and is very expensive and hence impractical for the kitchens in the homes of the pupils.

A good hard wood makes an excellent floor. Hard maple is perhaps the best, although yellow Georgia pine is very good. A combination of wood and tiling is excellent, the tiling being used under the sinks and ranges, for cleanliness and protection from fire. It is necessary to keep the cracks between wood and tiles well cemented. A satisfactory method of cleaning the wood floor is to wash it and occasionally rub it with oil, or a mixture of oil and wax.

The *woodwork* in the laboratory should be plain. The "tongue and groove" wainscoting should be eliminated from the laboratory because of its great difficulty in cleansing. The finish of the wood

may be either a good varnish on the natural wood, or a good quality of paint, which harmonizes with the general color scheme.

As was suggested above, the laboratory may be equipped for individual work alone, or it may be provided with some "units" representing the home kitchen, or it may consist entirely of these so-called units, providing for three or four girls to work in each, the number of units depending upon the size of classes. The size and shape of the room will determine the arrangement of laboratory tables.[1]

There are two general schemes of arrangement which should be noted here, — the hollow square, with openings convenient to the sinks, stoves, and supply tables; and the square tables, equipped for two or four, and arranged in a sequence dependent upon the shape and size of the room. The latter scheme approaches the unit kitchen idea, excepting that it may still have only the hot plate instead of the separate stove.

The kitchen should be as well equipped with sinks and hand bowls as the appropriation will allow. For obvious reasons, it is essential that at least one wash bowl be provided. Two sinks are highly desirable in the laboratory of average size, and the best modern equipment provides sinks set between the tables, the number depending upon the size of classes. It is wise to plan for a sink for every group of six girls or less. The sinks and wash bowls should be of porcelain, but may be made of a good enameled iron. Open plumbing must be provided. In the case of the wall sinks, good drain boards should be installed, porcelain being most desirable, although hard wood or enameled iron proves satisfactory.

An important consideration in planning equipment is that of the height of the sinks. They should be placed at such a distance from the floor that the members of the class will find it possible to stand erect while at work. Another important feature is the type of faucet. Care should be exercised in selecting faucets which regulate the flow of water without causing unnecessary splashing.

[1] For details concerning laboratory arrangement, see *Equipment for Teaching of Domestic Science*. By Helen Kinne. Whitcomb and Barrows, Boston, Massachusetts.

In selecting material for the table top, the following points should be considered: its nonabsorptive qualities, its ease of cleanliness, its wearing quality, its resistance to fire and chemicals.

Various types of table tops have proved very satisfactory. Perhaps the best is the unglazed tile which is durable if well laid, and easily cleaned. Hard wood is also satisfactory, hard maple being perhaps the best. It has the advantage over the tile of being less resonant and less liable to cause breakage of dishes. Marble stains and cracks, and is readily affected by chemicals, though it is easily cleansed. Several commercial tables have composition tops which are satisfactory. One firm manufactures a magnesium enamel table top, which is satisfactory if treated as directed by the manufacturer.

Commercial firms handling laboratory table equipment will aid the teacher in planning the arrangement of her room if their products are purchased.

In the arrangement of laboratories for elementary and high school use it is important to keep the equipment at such a height that the class work may be conducted without the obstruction of upper cabinets. Therefore in arranging units, or planning for the compromise unit and individual laboratory, this must be kept in mind. It is recommended that the rolling doors of cupboards be avoided because of the disturbance they cause when hurriedly opened and closed.

The *fuel* in use in the laboratory should be that which is used in the homes; and if several types of fuel are found in the community, there should, if possible, be provision for each in the school kitchen.

In selecting a *refrigerator* for the laboratory, the best available for the output will be the least expensive in the long run. It should be made by a standard firm which will be responsible for its durability. The well-constructed window refrigerator in winter will be economical.

There are several very helpful pieces of equipment which should be considered. The tray table is almost indispensable in the modern equipment. A folding wheel table is available. This is

especially valuable in equipping the unit kitchen, for it is the type of tray table which should be found in the average home. A well-framed, well-hung cork bulletin board is another valuable addition to the laboratory. A generous good blackboard is an absolute necessity, and a strip of cork running along the top of the board is very helpful in displaying illustrative material. A reliable clock should be purchased or installed by the school. A well-appointed desk should be provided for the teacher's use; and a bookshelf and reading table where helpful references may be found will not only dignify but enrich the work in foods.

In selecting utensils for the work in food preparation, it is well to remember that the more expensive may be most economical in the long run. Even though the teacher may be equipping a temporary kitchen in an old building, looking forward to a new permanent equipment, she should so far as possible select reliable and standard utensils which may form the nucleus of the future outfit.[1]

It may be well to urge again the wisdom in purchasing sufficient equipment for thorough work in the class, but to avoid overstocking. When one utensil can be wisely used by two or more pupils, it is extravagant not only of funds, but of storage space and nerve force to provide one for each pupil, and thus encumber the laboratory unnecessarily.

In considering the lighting of the laboratories in Home Economics, care should be taken to secure as even a light as possible. The modern lighting schemes are very desirable because of the even dissemination of light.

2. The dining-room. — The dining-room should represent the same room in the homes of the pupils, or in the homes in which they may serve later. In these days of thrift, the selection and use of tablecloths, napkins, and doilies should be carefully considered. In many schools, the dining-room will serve as the laboratory for teaching many home activities in addition to table service, such as house furnishing, the cleaning of silver and other household metals,

[1] For more complete details concerning equipment for laboratories, see *Equipment for Teaching Domestic Science*. By Helen Kinne Whitcomb and Barrows.

the care of polished furniture, the laundering of household linens and hangings, and the care of floors and their coverings. Although not desirable, the care and cleaning of the bedroom *may* be taught in any room, by the introduction of a couch or a single bed with its furnishings, which may be borrowed for the lessons or stored as part of the school equipment. This may of course necessitate the removal or the masking of some of the equipment.

In furnishing the dining-room, art and sanitation combine. The coöperation of the art department should be secured, and the room should be as attractive and homelike as it can be made. The selection of silver, china, and furniture should be made both from the standpoint of beauty and the labor involved in their care. The making of hangings and table furnishings will provide material for lessons in sewing. This room should be large enough to allow for class observation and discussion.

Even the simplest dining-room should, through its charm in furnishings, exhale the spirit of home which should characterise all the teaching of Home Economics.

*Equipment for teaching laundering and housewifery.* — The high school teacher of Home Economics who insisted that her girls could not wash their dish towels because no laundering equipment was provided by the board of education is hardly to be commended. Although no one would be willing to desecrate the dishpan by using it for the triple purpose of washing dishes, making the bread, and bathing the baby as one ingenious mother is reported to have done; still, the simple operation of the daily washing of towels should be taught, and if a dishpan is the only available utensil, certainly the operation is not so uncleanly as to be polluting.

However, all this is merely introductory to the point that no course in Home Economics is complete which omits laundry work as a home activity. The extent of the training will depend upon the available equipment; and, if necessary, sufficient equipment should be borrowed from the homes to make it possible.

The least expensive equipment consists of fiber tubs and medium sized wash-boards sufficient for individual or group work, a boiler

or a kettle reserved for the purpose of scalding the clothes and possibly a wringer, though the last is not essential. Irons and boards should be provided so that the girls may work in groups of not more than two or three.

If even this equipment is too expensive, it will be possible, though not desirable, to teach at least the laundering of dish-towels and other simple articles in each lesson to one or two girls. This will demand only the simplest home equipment.

This meager equipment is suggested, not as advisable, but in order to show that *laundering as a household activity can and should be included in every course in Home Economics.*

The well-equipped laboratory should have at least two stationary tubs, preferably of white or cream-colored porcelain. The soapstone tubs are good, but it is difficult to determine the correct shade of bluing in them. There should be ironing-boards and irons, — if possible, the sad iron, charcoal, electric, and gas, dependent upon the fuel available — in sufficient number to furnish opportunity for class instruction and practical work. By combining both the washing and ironing processes in the same lesson, the extent of equipment may be reduced.

If it is possible to equip a separate laboratory for the work in laundering, or for laundering and housewifery, it should be done; and in high schools which aim to give technical training this is practically a necessity. This laboratory should represent the best equipment possible for the homes in question or the commercial laundry which the girls may enter. Various types of equipment, — washing-machines, mangles, dryers, hampers, etc., — should be owned or borrowed from manufacturers for the purpose of demonstration.

For the teaching of housewifery, the extent of equipment will again depend upon available funds. It is urged, however, that in choosing such equipment the homes should be kept in mind, and the utensils and materials suitable for them should be selected. Labor-saving devices should be included in such an equipment only in so far as they will be possible in the homes of the pupils, or the homes into which they may go.

*Equipment for teaching the care of children.* — Even though it is impossible to invest in a cent's worth of equipment for teaching this phase of Home Economics there will be no excuse for omitting it from the course of study. Every community is equipped with infants and children, and their paraphernalia. Although in many cases the home equipment is not ideal from the standpoint of teaching the subject, there will be found in every neighborhood a progressive mother who can come to the school with her baby and its outfit; or a visiting nurse who may be called upon, or a day nursery, or a children's hospital which will gladly demonstrate the care and feeding of babies and young children.

However, some permanent school equipment should be purchased if possible. Even though a real baby is available, a life-sized washable doll should be the nucleus of such an outfit for purposes of practice in handling. There should be a well-selected outfit of clothing to fit the doll; bathing and feeding equipment. It will be wise to solicit the advice of a registered nurse familiar with the homes of the community in the selection of these articles; and, unless the home economics teacher has been well trained in the care of children, either a well-instructed mother or the trained nurse should demonstrate the bathing and dressing of the baby.

If the work in baby care is taught for the purpose of training mother's helpers or child nurses, it is essential that opportunity for practice be provided in a day nursery. One school maintains in the building a day nursery for small children in the families of the pupils; and the brothers and sisters of the babies are given not only instruction but experience in their proper care and feeding, the school program providing for this phase of their education.

As an important means of education an exhibition of "Articles and Acts which Interfere with the Babies' Welfare" will spread its influence into the community. The pacifier, the dangling rattle, the soiled plaything, etc., may be there "in person," while drawings may represent a bright light shining into the child's eyes, the young child lifted by one hand, the go-cart or carriage allowed to jar in dropping from walk to curb, the cruel cuff of the petulant mother or father.

In all the work on the care of the baby the type of community will regulate the extent of the teaching; for it is obvious that in some homes the care of children demands no special emphasis in the school curriculum. Emphasis should be laid upon the care which the girls in the classes can give; but the mother's care should be taught when needed, for the message which can thus be carried into the homes.

*Equipment for teaching home nursing and personal hygiene.* — In teaching home nursing to girls of elementary and high school age it is important that a proper evaluation of their limitations be grasped. It has been suggested that "health nursing" is a better term than home nursing, in order that the girls may know that their training in this line is only for the purpose of relieving the simplest ailments, or of intelligent care "till the doctor comes." It is significant that the Nursing and Health Department of Teachers College believes that the best preliminary training for the trained nurse is a course in Home Economics, and that it is often through such a course that girls may be led to an interest in nursing as a profession.

A well-equipped bed, a first-aid outfit, various types of bandages and simple home equipment for the care of the sick are desirable for the teaching of this phase of home economics work.

Perhaps personal hygiene is one of those subjects which demand illustrative material rather than equipment for practical work; though there are communities in which actual practice in the care of the teeth, hair, and nails should be provided for, and where the school baths should be utilized in carrying out suggestions made in class work.

The equipment which is needed at home for these processes should be used in the class work. Each girl may be called upon to bring her own comb and brush, tooth brush, and nail file. The wise choice and care of these tools will of course be emphasized.

Articles of clothing which are illustrative of the best type should be used in teaching such lessons; and they should be closely related to the work in physiology. Devices for allowing ventilation without draft should be included in such equipment. Towels, wash

cloths, and soaps are also essential, but may be brought from home.

**Charts, exhibits, and other illustrative material.** — Many phases of the home economics studies demand illustrative material, rather than organized equipment for carrying on practical work; other phases demand both organized equipment and charts, exhibits, etc. It is a subject which offers unending opportunities for collecting material, which is both valuable and useless. The real art and skill of the teacher will lie in the selection of the material which is really valuable.

*Importance of wise choice and effective use.* — It is very easy for the supply cupboards of the department of Home Economics to become filled with "dead timber." It is part of home-making education to learn when to retain and when to discard. Even though much free material is available, it should be carefully inspected and sorted, and only that which is truly valuable for class use should be kept. It happens that chocolate and cocoa firms, for example, are unusually generous in sending out exhibits showing the various stages in the manufacture of their products. Milling firms have also been very willing to accommodate schools by sending out material. The exhibits are all valuable, but it is urged that, unless need is felt for all, it is wise to secure material illustrative of many industries rather than of a few.

To be most effective in teaching, charts, exhibits, pictures, etc., should be kept on open display only while in actual use and for sufficient time afterward to allow of careful inspection. The old adage "familiarity breeds contempt" rings true in the case of ever-present illustrative materials; and the laboratory which is hung with material unrelated to the subject in hand cannot be kept clean.

A special cabinet, if possible, should be provided for the storage of material of this sort. A part of the cabinet may be equipped with glass doors, if desired; and such exhibits as may be specially attractive or educational may be displayed there. Changing exhibits may be shown, such as the one suggested for the care of children, others on "Protection from Flies," "Ways and Means of Keeping Household Accounts," "Methods of Food Preservation,"

"Energy Savers in Housekeeping," etc. The preparation of such exhibits should be a part of the class work.

Shallow drawers and cupboards with sliding shelves afford an excellent means of caring for charts, both rolled and flat. It is economical of time to label the rolled charts clearly on one exposed corner.

Pictures may be preserved by carefully mounting them on durable cardboard. Envelopes (with or without flaps) or boxes open either on one long side or the top, made of heavy cardboard and passe-partout paper, are satisfactory for filing. Filing cases are also valuable, but more expensive.

The use of heavy manila paper as folder covers, with staples as fasteners, is recommended for the filing of newspaper and magazine clippings. A cardboard folder, with a secure clamp adapted to one or more pamphlets, may be secured in various sizes. Discriminating classification is necessary for the effective use of such material.

A good device for the teacher who must carry her illustrative material about is the use of muslin for mounting. Thus a series of pictures illustrative of some phase of the work may be mounted on one piece of muslin, at sufficient distance to allow folding the cloth and not the pictures. Brass rings sewed at the upper corners permit the chart to be hung.

In the teaching of textiles and clothing there is much material, such as looms, spinning wheels, demonstration frames, etc., which demand space for storage. This must be provided in planning the equipment. Some of this material adds to the beauty of the laboratory, if kept clean and in good condition.

The alert teacher of textiles will add constantly to her exhibit material by collecting and mounting samples of material. A filing case is helpful in caring for these samples, well mounted with clearly stated details.

Various exhibits illustrating the manufacture of buttons, shears, cutlery, needles, thread, etc., may be secured from manufacturing firms; and firms manufacturing silk, cotton, linen, and wool into yarn and cloth frequently add much to the teaching of Home Economics through their exhibits.

Permanent exhibits of staple food products may be prepared by the girls in the classes as a phase of class work. Inverted glass bottles of varying sizes may be secured from firms dealing with science laboratory equipment.

The moving picture educational film has done much to bring the intricate mechanical processes to those who cannot see them at first hand. The present-day community center provides opportunity for the display of such films; and it is becoming quite common for schools to own machines. In lieu of the moving picture, the stereopticon and the stereoscope and stereograph offer visual education, and have the advantage of allowing deliberate inspection.

An exchange of letters and picture postals illustrative of local industries among pupils of various parts of the country has added materially to the interest of home economics work.

The attempt by some commercial firms to reproduce cooked foods in wax has proved successful; and such exhibits are helpful in a study of comparative food values.

Many stores are willing to loan material for exhibit purposes, others are very hospitable in receiving classes in the various departments for the inspection of house furnishings, clothing, etc. It is impossible to overemphasize the value of first-hand observation; visits to dairies, meat markets, bakeries, factories of all sorts, laundries, hospitals, day nurseries, etc., while expensive in energy and time are most valuable as a form of teaching.

In preparing exhibits of class work the home economics department has a very fertile field. The stereotyped exhibit of products, — the display of dresses and other garments; canned products, bread, cake, pies, etc., well-balanced breakfasts and dinners, — may be made more valuable if it is designed to serve as a deliberate means for the education of the community. With such an objective the girls will attack the task with a deeper purpose; and the explanations given by the girls at the time of the exhibit will serve as a means of clarifying their own information. In several of the larger cities the department of Home Economics in the high schools has served successfully in helping to educate the housewife in conservation measures through demonstrations and exhibits.

It is important that exhibits of foods be well protected, and that they be frequently renewed if perishable. The unattractive exhibit will repel rather than attract, and hence might better be eliminated.

**Suggested lists of equipment.** — In selecting the following lists of equipment, no attempt has been made to offer complete suggestions for the equipment of every type of laboratory. Rather, it has been deemed wise to quote typical lists of equipment which have been found satisfactory as a suggestive basis for the furnishing of other laboratories.

Furthermore, because of the present abnormal status of prices, it has seemed wise to omit them in presenting the lists. It may be said that the cost of equipping a department of Home Economics will vary with its extent; but it may be estimated that an adequate equipment may be secured for $800 to $2000.

## EQUIPMENT FOR TEACHING COOKING

*Suggested list of utensils* for laboratory equipped for twenty pupils, for individual work in cooking:

(Quoted from *Equipment for Teaching Domestic Science.* By Helen Kinne. Whitcomb and Barrows, 1911.)

### One for Each Pupil

(* Two each)

| | SIZE | MATERIAL |
|---|---|---|
| Bowl * | 1 qt. | earthen |
| Bread board | small | wooden |
| Dover beater | | |
| Egg beater | medium | wire |
| Frying pan | small | iron |
| Kitchen fork | | steel, wooden handle |
| Kitchen knife | | steel, wooden handle |
| Mat | 8 in. square | asbestos |
| Measuring cup | half-pint | tin |
| Mixing spoon | medium | wooden |

| | SIZE | MATERIAL |
|---|---|---|
| Pan | small | granite |
| Pepper shaker | | glass |
| Plate | | granite |
| Pop-over cup | | earthen |
| Salt shaker | | glass |
| Saucepan with cover | 1 pt. | granite |
| Spatula | medium | steel |
| Tablespoon | | plated |
| Teaspoon * | | plated |
| Vegetable knife | | steel, wooden handle |

ONE FOR TWO PUPILS

(* One for each preferred)

| | | |
|---|---|---|
| Biscuit cutter | | tin |
| Bread pan | medium | tin |
| Coffee pot | 1 pt. | granite |
| Colander | medium | tin |
| Dishpan | small | granite |
| Double boiler * | 1 qt. | granite |
| Grater | small | tin |
| Potato masher | | wire, wooden handle |
| Rinsing pan | | granite |
| Rolling pin | | wooden |
| Scrubbing brush | small | wooden back |
| Skimmer | small | tin |
| Strainer | medium | tin |
| Teapot | 1 pt. | earthen (Japanese) |
| Vegetable brush | small | wooden back |

ONE FOR FOUR PUPILS

| | | |
|---|---|---|
| Apple-corer | | tin |
| Bowl | 3 qt. | earthen |
| Chopping bowl | | wooden |
| Chopping knife | | steel |
| Muffin pan, deep | 8-in. pan | block tin |
| Nutmeg grater | | tin |
| Pitchers | 1 and 1½ pt.<br>1, 2, and 3 qt. | earthen |

### One for Ten Pupils

| | SIZE | MATERIAL |
|---|---|---|
| Baking dish | 3 pt. | earthen |
| Cake pan | medium | tin |
| Double boiler | 2 qt. | granite |
| Griddle | medium | steel |
| Griddle cake turner | | iron |
| Kettle | 4 qt. | granite |
| Lemon squeezer | | glass |
| Saucepan | 2 qt. | granite |

### One for Twenty Pupils

(* Two preferred)

| | | |
|---|---|---|
| Bread knife | | steel |
| Can opener | | |
| Cleaver | | steel |
| Coffee mill | | |
| Coffee pot | 2 qt. | granite |
| Corkscrew | | |
| Flour sifter | | tin (revolving handle) |
| Fruit jars, 2 doz. | ½ pt. | glass (lightning) |
| Frying kettle * | large | iron |
| Funnel | medium | tin |
| Ice-cream freezer | 3 qt. | |
| Jelly glasses, 2 doz. | | glass (tin covers) |
| Knife sharpener | | |
| Larding needles, set | | steel |
| Measure | 1 pt. | tin |
| Measure | 1 qt. | tin |
| Meat knife | medium | steel |
| Pudding mold * | 3 pt. | tin |
| Scales (spring) | to 12 lb. | |
| Steamer * | medium | tin |
| Strainer | 1 qt. | wire |
| Tea-kettle | large | granite |
| Toaster | medium | japanned |
| Tray | medium | japanned |

### Articles for Holding Provisions

| | Size | Material |
|---|---|---|
| 1 bin | large | metal, made to order |
| 6 covered jars | 4 qt. | earthen |
| 6 covered jars | 6 qt. | earthen |
| 1 doz. Japanned lid jars | 1 qt. | glass |
| 1 doz. Japanned lid jars | 2 qt. | glass |
| 1 doz. screw-top or glass stoppered jars | 1 pt. | |
| Labels of different sizes | | |
| 1 large wire box (like cheese box) | | |
| As much cupboard and closet room as possible | | |

### Towels, etc.

| | | |
|---|---|---|
| 40 dish cloths | ¼ yd. | linen |
| 50 dish towels | 1 yd. | linen |
| 6 roller towels | 2 yd. | linen |

*Suggested equipment for housework.* — This list may be considered as a unit for teaching housework, and the unit multiplied in case of large classes. In many cases the more expensive articles need not be multiplied, but the articles essential for individual work may be purchased in the number desired. Newspapers, soft cloths suitable for cleaning woodwork, floors, etc., may be brought from the homes of the children.

1 floor mop
6 floor cloths
1 wall cloth
1 hand mop for banisters, etc.
1 radiator brush
1 broom
1 whisk broom
1 scrubbing brush
1 short-handled floor brush
1 long-handled floor brush
1 sanitary dust pan
1 soft brush for cane and willow
1 folding steps
1 pail (galvanized iron)
3 dustless dusters

### Suggested List of Furnishings for the Practice Apartment

(See Addenda)

## EQUIPMENT FOR TEACHING SEWING

(Quoted from *Domestic Art in Woman's Education*. By Anna M. Cooley. Scribner, 1911.)

The cost of furnishings for a simple laboratory may be kept very low. The room should be large enough to seat the children comfortably, should be well lighted, the walls tastefully decorated, and have convenient space for storing materials. This room is almost a necessity where the school is a local center for work and the children of the neighboring schools attend it for their exercises in textiles and clothing. This method is adopted in smaller towns and cities in order to reduce the cost.

The special room is also an incentive to work. Children will often visit it at odd periods for completion of back work, or because of interest in the exhibits and a desire to study. It should be a center for such information as the teacher has to give. There should be low chairs for sewing, work tables, a cutting table, machines, blackboard, etc. This special room may often be used for other purposes, as these wing classes may not occupy it during all the periods. On that account it is wise to have folding tables which may be removed when it is necessary to clear the floor space. Tables hinged and attached to the walls may be let down and be out of the way when it is necessary to remove them. The following is a list of a simple, inexpensive laboratory equipment for grade school use for twenty-four pupils:

2 doz. chairs
8 work tables
2 cutting tables
(Kitchen tables stained)
4 sewing machines
Teacher's desk
Teacher's chair
1 demonstration cloth and needle
1 doz. waist forms
1 gas stove
2 flatirons
1 mirror

Good work may be done with the inexpensive equipment. Elaborate furnishings do not tend to increase the output or quality of the work. Additional facilities contribute to ease and conven-

ience of the worker and especially the teacher. A more expensive equipment is added below for upper grade use:

2 doz. chairs
1 doz. work tables
6 cutting tables
6 sewing machines
1 exhibit case
1 teacher's desk
1 teacher's chair
1 mirror
1 gas stove
6 flatirons
1 screen
1 demonstration frame
1 bulletin board
1 roll case for storing pupil's work — accommodating 4 classes
6 waist forms
1 ironing board

The cost of the laboratory equipment for the high school need be little more than that of the special room for upper grade work. The additional expense will probably be for the necessary articles for drafting and garment-making, such as yardsticks, skirt forms, etc.

The cost of the temporary equipment for both elementary and high school will depend somewhat on the method of purchase of materials. Materials bought at wholesale in large quantities may be obtained at great reduction. The care and use of the temporary equipment will also regulate the cost.

The cost of equipment in other types of schools will vary according to aim, number of pupils to be accommodated, and elaborateness of outfit. The equipment need not necessarily be expensive. The following lists of articles will furnish suggestions for those interested in both expensive and inexpensive equipment:

Bias cutter and marker
Boxes, sewing, cloth-covered — $8\times14\times2\frac{1}{2}$; $18\times16\frac{1}{2}\times4\frac{1}{2}$; $6\frac{1}{2}\times4\frac{1}{2}\times3$
Bulletin boards
Chairs:
  Bent wood, with cane seat
  Kitchen chairs (to be stained)
  Willow (for office use)
  Desk chairs (revolving, bent wood)

Desk chairs (with arms)
Laboratory chair (better class)
Cases:
Bookcases
Storage for work
Exhibit cases, gowns and hats
Exhibit cases, flat, according to size and finish
Exhibit cases, sliding glass doors
Ironing cabinets, zinc top (for ironing outfit, made to order)
Desks:
Flat top, well finished with side drawers
Flat-top table without side drawers
Roll-top desks for office use
Dress forms:
Full length
Waist length
Demonstration frames (made to order)
Emeries
Embroidery rings
Embroidery holders (Priscilla)
Files:
Letter files (for office use)
Card boxes and cataloguing schemes
Gas stoves
Irons, according to style and weight
Electric irons, 4 lb., nickel
Electric irons, 6 lb., nickel
Electric irons, 12 lb., nickel
Mirrors:
Hand-mirrors
Triple folding wall-mirrors (millinery purpose)
Triple folding dressmaking-mirror
Flat wall-mirrors, oak frames
Machines:
Single thread and double thread
With motor attachment
Pedestals (for fitting)
Pinking machine
Plaiting machine

Rollers (paper)
  Jumbo rollers, stand
  Drafting-paper
Rug (for office use)
Rattan couch
Stools, 24-in. cane-seat:
  24-in. wooden-seat
Screens, triple-folding
Seatings, classroom
Skirt-markers
Sleeve forms (per set 2)
Scissors:
  Straight cutting
  Straight shears
  Buttonhole
Tables:
  For conference purposes
  Ironing, ready made
  Ironing, made to order with wood top, 4×2 ft.
  Kitchen tables, 5 ft.
  Folding sewing tables
  Drafting tables made to order: 7 ft. long by 3 ft. wide by 2 ft. 8 in. high, whitewood top, oak base
  Drafting tables, removable tops and horses for support
  Sewing tables, made to order, oak, 6 ft. long by 2 ft. 4 in. high
Tape measures, reversible
Tracing wheels
Thimbles, German silver
Wire-cutters, side cutting
Waist and coat-hangers
Yardsticks

In selecting equipment for the teaching of textiles and clothing, it is necessary to consider very carefully the storage facilities as well as the arrangement of tables, cabinets, etc., in order to make the most of the available space. A very careful list should be made of those articles which are essential to successful work in the type of work to be presented.

## EQUIPMENT FOR UNIT KITCHENS

(Quoted from *Cooking in the Vocational School as Training for Homemaking*. By Iris Prouty O'Leary. United States Bureau of Education, Bulletin 1915, No. 1. Whole Number 625.)

### 1. Equipment for Common Use between the Three Kitchens

1 refrigerator
1 refrigerator pan, galvanized iron, large size
1 clothesline
1 wheeled table

### 2. Storeroom Equipment for Common Use

12 drip pans, 17×12 in.
6 pudding dishes, Guernsey ware, 9¼ in. outside measure
6 pudding dishes, Guernsey ware, 10¼ in. outside measure
12 crocks, with covers, 4 gal.
6 crocks, with covers, 2 gal.
1 teapot, earthenware, 2 qt.
150 casseroles, red clay, 7 oz., without covers, 4 in. outside
50 ramekins, Guernsey, white inside
24 custard cups, Guernsey, white inside
6 casseroles, Guernsey, round, with cover, 12 in. outside, No. 10
3 casseroles, Guernsey, round, with cover, 9 in. outside, No. 69
1 set measures, 1, 2, 4, 8 qt., ½ bu., bound, varnished, and sealed
1 double roasting pan
1 North Pole ice-cream freezer
1 White Mountain ice-cream freezer
1 Alaska ice-cream freezer
1 bread cutter
2 cake closets, white japanned, 3 shelves
2 bread boxes, white japanned
1 bread mixer, 8 loaves
1 hammer, 8 oz.
14 doz. glass cups, plain, with handle
1 coffee pot, copper bottom
1 stepladder, 4 steps

### 3. Equipment for One Kitchen of the Three Kitchens

1 gas stove
1 sink, Alberine stone, with back and cap, 36×22 in., faucets and connections included
1 table, pine, 5×29 in., with drawer
4 factory stools, 24 in.

*Woodenware*

1 mop handle
1 towel rack, 5 arms
1 set flour buckets, 3 in a set
4 pastry boards, 20×30 in., cleated ends
1 chopping bowl, 12 in., round, oiled
1 chopping bowl, 14 in., round, oiled
1 rolling pin, 10×1½ in., revolving handles
5 doughnut cutters
1 ham board, 10×14 in.
1 dish rack, folding
1 vegetable brush, 1½ in., twine-bound
1 scrub brush, solid back
1 potato masher
1 cake spoon, 12 in., slit bowl
2 cake spoons, 12 in., solid bowl

*Ironware*

1 fry pan, No. 7 size
1 fry pan, No. 8 size
1 griddle, medium size, with side handle, No. 8
1 frying kettle, with basket

*Earthenware*

3 nests of bowls, 5 in a nest (brown and white), Guernsey
1 platter, 12 in., white ware
1 platter, 18 in., white ware
2 pitchers, Portland style, 2½ qt.

*Glass*

12 measuring cups, thirds and quarters
4 lemon squeezers, lipped trays, No. 3

2 glass rolling pins, 12×3 in.
2 jugs, 1 gal.
8 jars with flat screw tops, 1 qt.
8 jars with flat screw tops, 1 pt.
1 butter jar, flat top, medium

*Cutlery*

6 spatulas, 6 in. riveted in handle
8 case knives, medium
8 forks, 3-prong, medium
6 vegetable knives, riveted handle
6 vegetable knives, ferrule driven in handle
1 center-cut bread knife
1 butcher knife, 6 in.
1 bread knife, 8 in.
1 mincing knife, 2 tangs in handle
1 flesh fork, wooden handle
1 ice pick, 6 in. long
4 knives, Lasher silver
4 forks, Lasher silver
1 steel for sharpening

*Spoons*

2 sets aluminum measuring spoons ¼, ⅓, ½
1 aluminum spoon, 13 in. long
1 aluminum spoon, 16 in. long
12 teaspoons, Lasher silver
8 tablespoons, Lasher silver

*Agate or Enamel Ware*

1 teakettle, seamless, 5 qt.
1 saucepan, 2 qt., lipped
1 saucepan, 3 qt., lipped
1 saucepan, 4 qt., lipped
3 enamel covers for the above
1 rice or milk boiler, 1 qt., with enamel cover
1 rice or milk boiler, 2 qt., with enamel cover
1 rice or milk boiler, 3 qt., with enamel cover

1 rice or milk boiler, 4 qt., with enamel cover
1 stove pot, 14 qt., with enamel cover
4 Berlin kettles, 6 qt., with enamel cover
2 pie plates, large, 11-in. diameter, 1¼ in. deep
12 pie plates, small, 9-in. diameter, ¾ in. deep
1 wash bowl, 12-in. diameter
1 dishpan, 16½-in. diameter, 5 in. deep
1 ladle with hooked handle
1 colander, No. 2 size
1 coffee pot, 4 qt., enamel cover
1 corner sink strainer

*Tinware*

1 strainer, 4 in., with rest and wooden handle
1 strainer, fine, 6 in. in diameter
1 strainer, coarse, 6 in. in diameter
1 soap shaker, large
7 cake coolers, 10×14 in.
1 dish drainer, heavy wire
2 potato ricers
1 funnel, large, 7 in.
1 funnel, small, 4½ in.
1 flour sifter
6 bread tins, No. 1 sponge
2 cake pans, No. 2 square biscuit
2 cake pans, No. 1 square biscuit
1 grater, No. 2
1 grater, No. 2 (different make)
1 colander, 12 in.
1 cake turner, square
1 quart measure, graduated
1 corer
1 milk bottle opener
12 biscuit cutters, 4 each of sizes Nos. 1, 2, and 3
1 skimmer ladle
1 wire dishcloth
2 sets muffin tins, 12 in a set
1 angel-cake tin, tube, removable bottom

*Miscellaneous*

1 garbage pail, with cover, galvanized iron
1 rubbish can, galvanized iron
1 scrub pail, 12 qt., heavy, galvanized iron
1 twine mop, medium, 16 oz.
1 broom
1 can opener, with corkscrew
3 egg beaters, No. 1
2 egg beaters
1 set spice boxes, 5 in a set, white enamel
1 dustpan
1 sanitary dustpan
1 dustpan brush
1 dustpan brush No. 3
1 cream whip, 1 qt.
1 ice-cream disher, 10 portions to quart
1 food chopper
4 asbestos mats, round, 10 in., tin bound
4 asbestos mats, oval, 12 in., tin bound

## SUGGESTED LAUNDRY EQUIPMENT FOR CLASS OF EIGHT

### A. Articles That Are a Usual Part of a School Kitchen Equipment

(Quoted from *Equipment for Teaching Domestic Science.* By Helen Kinne. Whitcomb and Barrows, 1911.)

1 agate soap cooker
1 agate double boiler for starch
1 teakettle
1 dishpan, 14 qt.
1 yellow earthenware bowl, 1 qt.
1 yellow earthenware bowl, 2 qt.
1 yellow earthenware bowl, 4 qt.
8 yellow earthenware bowls, 1 pt.
2 tin measuring cups, ½ pt.
6 tablespoons
6 teaspoons
8 case knives
1 wooden spoon

### B. Necessary Articles to Be Purchased

1 large fiber tub
12 small fiber tubs
1 fiber pail
4 flatirons, 7 lb.
4 flatirons, 6 lb.
8 flatirons, 5 lb.
8 flatirons, 4 lb.
8 Troy polishers
2 flounce irons
8 iron stands
8 iron holders (asbestos)
1 large wringer, "Universal"
2 small wringers
1 tin dipper
1 oval clothes basket
1 oval boiler
6 benches (4 ft. long)
8 skirt boards (with folding supports, uncovered, 4½ ft. long)
8 small washboards (¾ usual size, special order)
2 clotheshorses, 4 ft. high, fourfold
1 fringe brush
3 soft brushes
3 whisk brooms (sprinklers)
100 ft. clothesline
Clothes pins
Safety and toilet pins
1 yd. white flannel
10 yd. cheesecloth
Skirt board covers, 10 yd. unbleached cotton
4 yd. cotton felting (54 in. wide)

As a means of lessening expense in the purchase of equipment, it is possible to reduce or increase this list of articles for use in teaching laundering. Care should be taken to select utensils which are of durable quality and of practical size for home use.

## SUGGESTED EQUIPMENT FOR TEACHING TABLE SERVICE

(Quoted from *Equipment for Teaching Domestic Science.* By Helen Kinne. Whitcomb and Barrows, 1911.)

| | SIZE | MATERIAL |
|---|---|---|
| Table felt | | |
| Dining-room table and chairs | | oak |
| 3 tablecloths | | linen |
| 2 doz. napkins | | linen |
| 1 doz. doilies | | linen |
| 1 doz. bowls (for cereal) | small | china |
| 1 doz. cups and saucers | tea | china |
| 1 doz. cups and saucers | after dinner coffee | china |
| 1 doz. dinner plates | | china |
| 1 doz. soup plates | | china |
| 1 doz. tea plates | | china |
| 1 bread plate | | china |
| 2 covered vegetable dishes | medium | china |
| 2 uncovered vegetable dishes | medium | china |
| 1 platter | large | china |
| 1 platter | medium | china |
| 1 platter | small | china |
| 1 salad dish | medium | china |
| 1 doz. sauce dishes | medium | china |
| 1 teapot | medium | china |
| 1 cream pitcher | medium | china |
| 1 sugar bowl | medium | china |
| 1 fruit dish | medium | glass |
| ½ doz. salt shakers | small | glass, silver top |
| ½ doz. pepper shakers | small | glass, silver top |
| 2 doz. teaspoons | | silver plated |
| 1 doz. dessert spoons | | silver plated |
| ½ doz. tablespoons | | silver plated |
| 1½ doz. knives | | silver plated |
| 1½ doz. forks | | silver plated |
| 1 doz. tumblers | | glass |

## SUGGESTIONS FOR STUDY AND REVIEW

1. Draw the floor plans and indicate the stationary equipment of a department of Home Economics, such as you would choose to establish, in a general high school of 500 students.

2. Suggest various ways of introducing the home environment into the school laboratory.

3. Plan the simplest equipment which you would consider effective for teaching food preparation to the children, in a settlement or one-room rural school, classes of ten. Determine cost.

4. Develop more fully than the chapter does the laundry equipment necessary for effective work in laundering in the elementary school, to be carried on in the food, or clothing laboratory.

5. Visit a home economics department and criticize the equipment from the standpoint of:

(*a*) Adaptation to needs of classes.
(*b*) Convenience and economy of time and effort.
(*c*) Hygiene.
(*d*) Attractiveness.

## REFERENCES FOR COLLATERAL READINGS

Equipment for Teaching Domestic Science. Kinne.

Domestic Art in Woman's Education. Cooley.

Household Arts Teachers Manual and Course of Study for Grades 7–10, inclusive. Commonwealth of Massachusetts. Bulletin of Board of Education 1916, No. 29, whole No. 78.

Tentative Course of Study in Household Arts for the 7th and 8th Grades, Speyer School, 1914–1915.

The Amy Schüssler Apartment. Teachers College Record. January and March, 1915.

Laundering. Balderston.

Housewifery. Balderston.

Home and Community Hygiene. Broadhurst.

Education for the Home. Andrews. Part I. U. S. Bureau of Education, Bulletin 1914, No. 36, whole No. 610.

Cooking in the Vocational School as Training for Home Making. Iris Prouty O'Leary. U. S. Bureau of Education, Bulletin 1915, No. 1, whole No. 625.

# CHAPTER XVII

## LITERATURE

I. Available literature in Home Economics.
   A. The importance of learning how to use it correctly.
II. The division of the bibliography.
   A. General references.
   B. Subject matter references.
   C. Textbooks in Home Economics for use in elementary and secondary schools.
   D. Government and state publications, magazines, association journals, etc.

**Available literature in Home Economics.** — Each year brings a wealth of new reference and textbook material, and all students in training as teachers of Home Economics as well as graduates should keep in touch with the various sources and kinds of literature. A graduate of a certain normal school of Home Economics returned for a visit to her Alma Mater. She was most enthusiastic about her work and success in the teaching field, but naïvely remarked that her college notebooks were so helpful and clear that she hadn't had to use any books since she left college.

*The importance of learning how to use books.* — The use of either reference or text cannot be overemphasized in the training of teachers of Home Economics, and the necessity for using them while teaching the various subjects is equally important.

Not long ago a teacher traveled clear across the continent in order to make a model book of stitches on samplers. She had lost hers in the San Francisco fire and did not know how to teach without it or to get the information which had been demolished by the earth's upheaval. She was also totally oblivious of the fact that stitches for stitches' sake had long ago ceased to be good pedagogy in this field.

Modern method encourages the use of all kinds of literature that contribute to the better or broader understanding of a subject. It is always satisfying to have recourse to more than a textbook offers, and especially so, when the source of information is as reliable as may be found.

Home Economics is especially favored in the help that the Federal and the various state governments have contributed to its literature, and is indebted to many universities and colleges for a more intensive treatment of many subjects than any textbook can allow. It is very desirable that publications of this type be accessible to the high school student and that she be encouraged to make use of them. The addresses of all high schools should be on the government mailing lists so that the publications that deal with home economics subjects may be obtained.

The literature distributed by the agricultural extension departments frequently gives valuable information for home economics students, and while it is designed to give information for a given locality, much of it is applicable to other places as well. Upon request this literature is very freely distributed for school purposes.

Other publications, such as technical journals and magazines devoted to special subjects, will be of great help and interest to students and should be found on reference shelves or reading table.

The field of journalism is proving ever more attractive to experts in the field of Home Economics and much that is of value may be found in daily papers. One must be able to exercise good judgment in the selection of all popular articles, but it is well to have students become interested in reading and collecting literature which may be posted and later filed for reference. Valuable contributions are continually being made to the subject of Home Economics, and as these appear in pamphlet, magazine, or newspaper form they should be utilized as a valuable part of home economics literature.

During the past few years the number of satisfactory textbooks for home economics teaching has rapidly increased, whereas in former years the trained teacher was forced to depend upon various sources for class reference reading, and her own training almost

entirely for the power to organize and present it. To-day there are many up-to-date textbooks. The modern task lies in selecting a textbook that presents the material in home economics studies which is best adapted to the age of the pupils, to the type of work to be taught, and to the home and community interests. Even with the best of textbooks, however, the teacher must exercise individuality and versatility in the adaptation of the textbook to the needs of her pupils, and she must adjust the sequence of her course and regulate the emphasis in the text to meet their demands.

There are two main classes of textbooks available, namely:

(1) Textbooks which give specific subject matter in relation to the various topics discussed.

(2) Textbooks which serve as guides to the teacher and stimulus to the pupils in the method of procedure, *in addition to* presenting the subject matter of Home Economics in its numerous phases.

A reliable book of recipes is satisfactory as a textbook in food preparation under certain conditions. It provides the girl with a book which is valuable for present home use for herself and her mother, thus establishing a sympathetic understanding between them; and, in later years, will be even more helpful to the girl because of her familiarity with it and the scientific principles upon which the recipes are based. It is also valuable as a means of eliminating extensive notebook work in the copying of recipes, which is poor pedagogy. However, unless the recipe book is used by a teacher with broad vision and a full appreciation of the scope of her subject, the course as presented is in danger of becoming decidedly limited in its scope.

A similar statement might be made concerning a book which gives the details of manipulation in sewing. The teacher's training must be such as to give her the ability to utilize such a text as a nucleus for a course, or as a text for a part of a more comprehensive course.

Similar to the type of book described are the textbooks which give in clear, concise form the principles involved in sewing, cooking, and cleaning processes, with practical applications of these processes. Although usually dependable in point of science and accuracy of statement, they must serve as a tool only in the hands

of a versatile teacher, and must be interpreted in relation to the local conditions.

The textbook which more closely meets the needs of modern educational principles is that one which combines the clear, interesting statement of subject matter covering the recognized content of Home Economics, with suggested methods of presenting the subject discussed and interesting problems, queries, experiments, etc., introduced at psychological points in the text. As the reviewer of a recent textbook puts it, "There is a familiarity that loses nothing of conventionality, which is high art with pen or voice. There is a descent to minutest detail without dropping the dignity of science, which is even a rarer art." Such a book is very valuable in the hands of the teacher with limited training; and, furthermore, it may serve as a basis for the course presented by the well-trained, experienced teacher who will use it as an aid but not as a guide in her course, excepting in so far as she believes it to meet the specific needs of her pupils. This modern textbook when properly used will dignify and strengthen the work in home economics teaching, and should be indispensable to the up-to-date teacher of home economics studies.

**The division of the bibliography.** — For the sake of easy classification and perusal the bibliography in this chapter has been divided into four sections:

A. General references.
B. Subject matter references.
C. Textbooks in Home Economics for use in elementary and secondary schools.
D. Government and state publications, magazines, association journals, etc.

## GENERAL REFERENCES

### (1) Modern Educational Aims and Ideals

The Meaning of Education. Butler. Scribner. 1915. $1.50.
Educational Situation. Dewey. University of Chicago Press. $.50.
School and Society. Dewey. University of Chicago Press. 1915. $1.00.

Child and Curriculum. Dewey. University of Chicago Press. 1902. $.25.

Schools of To-morrow. Dewey. Dutton. 1917. $1.50.

Democracy and Education. Dewey. Macmillan. 1916. $1.40.

Industrial Education. Russell and Bonser. Columbia University Press. 1912. $.30.

A Modern School. Hanus. Macmillan. 1904. $1.25.

Educational Aims and Educational Values. Hanus. Macmillan. 1899. $1.00.

Educational Reform. Eliot. Century. 1898. $2.00.

Changing Conceptions of Education. Cubberley. Houghton Mifflin. 1909. $.40.

Problems of Educational Readjustment. Snedden. Houghton Mifflin. 1913. $1.50.

A Modern School. Flexner. Publication of General Education Board. New York City. 1916. No charge.

Changes Needed in American Secondary Education. Eliot. Publication of General Education Board. New York City. 1916. No charge.

Principles of Secondary Education. Edited by Paul Monroe. Macmillan. 1914. $2.00.

Principles of Secondary Education. DeGarmo. Macmillan. 1913. 3 vols. $1.25, $1.00, $1.00.

Problems of Secondary Education. Snedden. Houghton Mifflin. 1917. $1.50.

The Elements of Practical Arts for General Education. Bigelow. Teachers College Record. November, 1915.

The Education of To-morrow. Weeks. Sturgis and Walton. 1916. $1.25.

The American High School. Brown. Macmillan. 1910. $1.40.

The High School. Frank Smith. Sturgis and Walton. 1916. $2.00.

Democracy's High School. Lewis. Houghton Mifflin. 1914. $.60.

The High School. Stout. Heath. 1914. $1.50.

The American Secondary School. Sachs. Macmillan. 1912. $1.10.

Democratizing Secondary Education by the 6–3–3 Plan. Bonser. Educational Administration and Supervision. November, 1915.

A School Master of the Great City. Patri. Macmillan. 1917. $1.25.

The Junior High School. Journal of Educational Administration and Supervision. September, 1916. Special number devoted to problems of the Junior High School.

Report of the Committee on the Junior High School. Massachusetts High School Masters Club. March, 1917. Published by Heath. Boston.

School Review.

Robinson, E. V. D. Reorganization of the Grades and the High School. 20: 663–688. December, 1912.

Judd, C. H. The Junior High School. 33: 25–33. January, 1915.

Weet, H. S. A Junior High School. 24: 142–151.

Judd, C. H. The Junior High School. 24: 249–360.

Elementary School Journal.

The Work of the Intermediate Schools at Los Angeles. 15: 361–377.

Horn, P. W. The Junior High School in Houston, Texas. 16: 91–95.

Study of the Junior High School Project. Joseph Abelson. Education. September, 1916.

Ayres. The Organization of Intermediate or Junior High Schools. Springfield Survey. 1914. Russell Sage Foundation.

Davis. Subject Matter and Administration of the 6–3–3 Plan of Secondary Schools. Bulletin No. 9. 1915. University of Michigan.

Briggs, T. H. Secondary Education Report of the United States Commissioner of Education. Vol. 1. Chap. VI. 1914.

Bunker, F. F. Reorganization of the Public School System. United States Bulletin No. 8. 1916.

Davis, C. O. Principles and Plans for Reorganizing Secondary Education. In Johnston's "High School Education," pp. 67–105. Scribner. 1912.

New Ideals in Rural Schools. Betts. Houghton Mifflin. Boston. 1913. $.60.

Country Life and Country Schools. Carney. Row Peterson. 1912. $1.25.

The Improvement of Rural Schools. Cubberly. Houghton Mifflin. Boston. 1912. $.35.

Rural Life and Education. Cubberly. Houghton Mifflin. Boston. 1914. $1.50.

The Country School. Seerley. Scribner. 1913. $1.00.

Among Country Schools. Kern. Ginn. Boston. 1906. $1.50.

The American Rural School. Foght. Macmillan. New York. 1910. $1.25.

Better Rural Schools. Betts and Hall. Bobbs-Merrill. New York. 1914. $1.25.

The Country Life Movement. Bailey. Macmillan. 1916. $1.25.

The Challenge of the Country. Fiske. Associated Press. 1916. $.75.
Chapters in Rural Progress. Butterfield. University of Chicago Press. 1908. $1.00.
The Work of the Rural School. Eggleston and Bruère. Harpers. 1913. $1.00.

## (2) General and Special Training Method

*General*

The Method of the Recitation. McMurry. Macmillan. 1908. $.90.
Elementary School Standards. McMurry. World Book. 1913. $1.50.
How to Teach. Strayer and Norsworthy. Macmillan. 1917. $1.30.
Elements of Psychology. Thorndike. A. G. Seiler. New York City. 1907. $1.25.
Principles of Teaching. Thorndike. A. G. Seiler. New York City. 1906. $1.25.
Talk to Teachers on Psychology and Life's Ideals. James. Holt. 1915. $1.50.
Psychology. Briefer Course. James. American Science Series. 1915.
A Brief Course in the Teaching Process. Strayer. Macmillan. 1911. $1.25.
Types of Teaching. Earhart. Houghton Mifflin. 1915. $1.25.
Interest and Education. DeGarmo. Macmillan. 1902. $1.00.
The Art of Questioning. Fitch. Bardeen. 1879. $.25.
The Question as a Measure of Efficiency in Instruction. Stevens. Teachers College. 1912. $1.00.
Methods of Teaching in High School. Parker. Ginn. 1918. $1.50.
The Learning Process. Colvin. Macmillan. 1911. $1.25.
Classroom Management, Its Principles and Technique. Bagley. Macmillan. 1907. $1.25.
School Management and School Methods. Baldwin. Appleton. 1879. $1.50.
How We Think. Dewey. Heath. Boston. 1912. $1.00.
How to Study. McMurry. Houghton Mifflin. 1909. $1.25.
How to Teach the Elementary Subjects. Rapeer. Scribner. 1918. $2.25.
Introduction to High School Teaching. Colvin. Macmillan. 1917. $1.50.
The Project Method. Kilpatrick. Teachers College Record. September, 1918.

The Educative Process. Bagley. Macmillan. $1.25.
Projects in the Primary Grades. Krackowizer. Lippincott. 1919. $1.25.

*Special Teaching Method*

Home Economics Studies in Grades Seven to Twelve. Teachers College Record. March, May, September, 1918.
Domestic Art in Woman's Education. Cooley. Scribner. New York City. 1911. $1.40.
Planning the Lesson in the Preparation of Foods. Winchell. Article in Teachers College Record. November, 1915.
The Place of Industries in Elementary Education. Dopp. University of Chicago Press. 1909. $1.00.
Tentative Course of Study in Household Arts for Speyer School. Grades Seven and Eight. Bureau of Publications. Teachers College.
Tentative Course of Study in Household Arts for P. S. 43, Manhattan. Grades Seven and Eight. Bureau of Publications. Teachers College.
The Amy Schüssler Apartment. Teachers College Record. January and March, 1915.
A Year's Work in Industrial Arts for the Third Grade. Bennett. Bureau of Publications. Teachers College. New York City.
A Year's Work in Industrial Arts for the Fifth Grade. Stilmar. Bureau of Publications. Teachers College. New York City.
Speyer School Curriculum. Bureau of Publications. Teachers College. New York City. $.50.
Horace Mann Curriculum. Bureau of Publications. Teachers College. New York City.
Course of Study and Teachers Manual for Grades Seven to Ten. Framingham Normal. Published by Massachusetts Board of Education. Boston.
School Credit for Home Work. Alderman. Houghton Mifflin. 1915. $1.00.
Lake Placid Conference Reports. 1899–1908. Obtained from American Journal of Home Economics, 1211 Cathedral Street, Baltimore, Maryland.
Clothing and Health. Kinne and Cooley. Macmillan. 1916. $.65.
Food and Health. Kinne and Cooley. Macmillan. 1916. $.65.
Home and the Family. Kinne and Cooley. Macmillan. 1917. $.85.
How Two Hundred Children Live and Learn. Reeder. Rudolph Rex Charities Publication Committee. 1910. $1.25.

The Home School. Trowbridge. Houghton Mifflin. 1913. $.60.
The Problem and Project Method. Teachers College Record. September, 1918.

### (3) Vocational Education

*General References*

Vocational Education. Snedden. Houghton Mifflin. 1912. $.40.
The Problem of Vocational Education. Snedden. Houghton Mifflin. 1910. $.35.
Education for Efficiency. Davenport. Heath. 1914. $1.00.
Industrial Education with Special Reference to Academic Ideals. Davenport. Heath. 1914. $1.00.
Beginnings in Industrial Education. Hanus. Houghton Mifflin. 1908. $1.00.
The Making of a Girls' Trade School. Woolman. Whitcomb and Barrows. Boston. 1910. $.50.
Industrial Education; Its Problems, Methods, and Dangers. Leake. Houghton Mifflin. 1915. $1.25.
Examples of Industrial Education. Leavitt. Ginn. 1912. $1.25.
Prevocational Education in Public Schools. Leavitt and Brown. Houghton Mifflin. 1915. $1.10.
Publications of National Society for Vocational Education, 140 West 42 Street, New York City.
The Worker and the State. Dean. Century. 1912. $1.50.
Vocational Secondary Education. Report of National Educational Association Commission. Published by United States Department of Education. 1916. Bulletin. No. 21.
Vocational Surveys: Minneapolis, Indianapolis, Richmond. Published by National Society for Vocational Education, 140 West 42 Street, New York City.
Readings in Vocational Guidance. Bloomfield. Ginn. 1915. $2.25.
The Vocational Guidance of Youth. Bloomfield. Houghton Mifflin. 1915. $1.25.
Education for Efficiency. Davenport. Heath. 1914. $1.00.
Vocational Psychology. Hollingworth. Appleton. 1916. $2.00.
Our Schools in War Time and After. Dean. Ginn. 1918. $1.25.
Cooking in the Vocational School. O'Leary. United States Bureau of Education Bulletin.

Choosing a Vocation. Parsons. Houghton Mifflin. 1909. $1.00.

The Vocational Guidance Movement. Brewer. Macmillan. 1918. $1.25.

Women's Educational and Industrial Union. 264 Boylston Street, Boston. Department of Research.

Vol. I. Vocations for the Trained Woman. Parts I, II, III.

Vol. III. The Living Wage of Women Workers.

Vol. IV. Dressmaking as a Trade for Women.

Vol. V. Millinery as a Trade for Women.

And other volumes.

Fatigue and Efficiency. Goldmark. Russell Sage Foundation, 130 East 22 Street, New York City. 1912. $2.00.

Vocation Bureau of Boston. 6 Beacon Street. Reports. Bulletins. Vocations for Boston Girls. 1911–1912.

Young Women's Christian Association. Occupations for Girls. Suggestions for Preparation of Vocational Charts. Miss Helen Thomas. Training School, Y. W. C. A., 600 Lexington Ave., New York City.

Publications on Vocational Education of Russell Sage Foundation, New York City.

Survey of Occupations Open to Girls of Fifteen to Sixteen Years. Boston Girls' Trade Education League. Dodge. 1912.

Publications of Cleveland Foundation Education Survey Committee. 1915–1916.

May be obtained from Division of Education of the Russell Sage Foundation, 130 East 22 Street, New York City. Twenty-five sections, many on vocational subjects such as, Wage-earning and Education; Girls and Boys in Commercial Work; The Garment Trades; Department Store Occupations, etc.

Publications of Federal Board for Vocational Education. Ouray Building, Washington, D. C.

Bulletins: Vocation Series 1 to 14. $.10 each. Prepared by Appointment Bureau of Women's Educational and Industrial Union. 264 Boylston Street, Boston, Mass.

### (4) The Girl; Her Opportunities for Work and Guidance

Youth, Its Education, Regimen, and Hygiene. Hall. Appleton. 1907. $1.50.

Adolescence. Hall. Appleton. 1904. $7.50.

The Education of Women. Talbot. University of Chicago Press. 1910. $1.25.

Women and Social Progress. Nearing. Macmillan. 1912. $1.50.
Women in Industry. Abbott. Appleton. 1910. $2.00.
Women and the Trades. Butler. Charities Publication Committee. 1909. $1.50.
Vocations for Girls. Laselle and Wiley. Houghton Mifflin. 1913. $.85.
Vocations for Girls. Weaver. Barnes. 1913. $.80.
Profitable Vocations for Girls. Weaver. Barnes. 1915. $.80.
How Women Can Earn a Living. Candee. Grossett. 1910. $.75.
Vocations for the Trained Woman. Women's Educational and Industrial Union, Boylston Street, Boston, Mass. Longman's. 1914. $1.50.
The Woman Who Spends. Richardson. Whitcomb and Barrows. 1910. $1.00.
The Girl Who Earns Her Own Living. Richardson. 1909. $1.00.
The Economic Function of Woman. Devine. Teachers College Bulletin. Second Series. No. 3. 1910.
The Girl of To-morrow. Andrews. Teachers College. 1911. $.15.
The Business of Being a Woman. Tarbell. Macmillan. 1912. $1.25.
Woman and Labor. Schreiner. Stokes. 1911. $1.25.
The High School Age. King. Bobbs-Merrill. 1914. $1.00.
The Girl in her "Teens." Slattery. S. S. Times Co. 1910. $.50.
Democracy's High School. Lewis. Chap. III. Houghton Mifflin. 1914. $.60.
The High School. Stout. Chap. VIII. Heath. 1914. $1.50.
The American High School. Brown. Chaps. VIII and XI. Macmillan. 1909. $1.40.
The Child as a Member of Society. Teachers College Record. November, 1915.
Making Both Ends Meet. Clark and Wyatt. Macmillan. 1911. $1.50.
The Vocational Guidance of Youth. Bloomfield. Houghton Mifflin. 1911. $.60.
Vocational and Moral Guidance. Davis. Ginn. 1914. $1.25.
Vocational Guidance. Pepper. Rand McNally. $1.25.
The Training of the Girl. McKeever. Macmillan. 1914. $1.50.
Farm Boys and Girls. McKeever. Macmillan. 1912. $1.50.
Girls and Education. Briggs. Houghton Mifflin. 1911. $1.00.
Opportunities in Occupations Other than Teaching. Intercollegiate Bureau of Occupations. New York. 1915. $.05.
Historical Outline of Y. W. C. A. Movement in America. Wilson. Y. W. C. A. 1908. $1.25.

Vocations for the Trained Woman. Women's Educational and Industrial Union. Boston. 1914.

The Making of a Girls' Trade School. Woolman. Whitcomb and Barrows. 1909. $.60.

The American Country Girl. Crow. Stokes. 1915. $1.50.

Handbook for Girl Scouts. How Girls Can Help Their Country, adapted from Baden-Powell's handbook, 527 Fifth Avenue, New York City. $.28.

The Book of the Camp Fire Girls. Doran. $.25.

### (5) History and Development of Home Economics

Education for the Home. Andrews. Parts I, II, III, IV. Bureau of Education. Washington, D. C.

History of Home Economics Movement. Bevier and Usher. Whitcomb and Barrows. Boston. 1906. $.75.

Cyclopedia of Education. Articles on Household and Industrial Arts. Macmillan. 1915.

Lake Placid Conference Reports. 1899–1908.

American Journal of Home Economics. American Home Economics Association. 1909–1918. 1211 Cathedral Street, Baltimore, Maryland.

Syllabus of Home Economics. Published by American Home Economics Association, Baltimore, Maryland. $.50.

Principles of Secondary Education. Chap. XVI. Monroe. Macmillan. 1914. $2.00.

Vocational Secondary Education. Bulletin 21, 1916. Bureau of Education, Washington, D. C. $.15.

Household Arts Review. Published by Household Arts Club. Teachers College. 1908 to 1914.

### (6) The Teacher — Her Responsibilities

Life of Alice Freeman Palmer. Houghton Mifflin. 1908. $1.50.

The Teacher. Palmer. Houghton Mifflin. 1908. $1.50.

Life of Ellen H. Richards. Hunt. Whitcomb and Barrows. 1912. $1.50.

Talks on Psychology and Life's Ideals. James. Holt. 1913. $1.00.

Talks to Teachers. James. Holt. 1899. $1.50.

The Efficient Life. Gulick. Doubleday, Page. 1907. $1.20.

The Art of Right Living. Richards. Whitcomb and Barrows. 1904. $.50.
Life of Mary Lyon. Gilchrist. Houghton Mifflin. 1910. $1.50.

### (7) Equipment

Equipment for Teaching Domestic Science. Kinne. Whitcomb and Barrows. 1916. $.75.
Domestic Art in Woman's Education. Cooley. Chap. VI. Scribner. New York. 1911. $1.40.
The Amy Schüssler Apartment. Teachers College Record. January and March, 1915.
Rural School Houses. Dressler. Bulletin of United States Bureau of Education.
Consolidation of Rural Schools. Monohan. Bulletin of the United States Bureau of Education. 1914.
The Efficient Kitchen. Child. McBride, Nast. New York. 1914. $1.25.
Country Life and the Country School. Carney. Appendix, equipment. Row Peterson. 1912. $1.25.
Cooking in the Vocational School. O'Leary. Bulletin of United States Bureau of Education. 1915.

## II. SUBJECT MATTER REFERENCES

### (1) Cookery and Table Service

Home Science Cook Book. Lincoln and Barrows. Whitcomb and Barrows. 1908. $1.00.
Boston Cooking-School Cook Book. Farmer. Little, Brown. 1916. $2.00.
A New Book of Cookery. Farmer. Little, Brown. 1915. $1.75.
Boston Cook Book. Lincoln. Little, Brown. 1904. $2.00.
Elements of the Theory and Practice of Cookery. Williams and Fisher. Macmillan. 1916. $1.00.
Lessons in Cookery through the Preparation of Meals. American School of Home Economics. Chicago. 1912. $2.00.
The Up-to-Date Waitress. Hill. Little, Brown. 1914. $1.50.
The Expert Waitress. Springsteed. Harpers. 1912. $1.00.
Practical Cooking and Serving. Hill. Doubleday, Page. 1912. $1.80.

How to Cook and Why. Condit and Long. Harpers. 1914. $1.00.
Recipes for Fifty. Frances Smith. Whitcomb and Barrows. 1913. $1.50.
Table Service. Allen. Little, Brown. 1915. $1.25.
Simple Directions for Waitress. Wadhams. Longmans. 1916. $.50 each.
Principles of Cooking. Conley. American Book. 1914. $.52.
Basic Principles of Domestic Science. Frick. Muncie Normal Institute. 1916. $1.15.
Selection and Preparation of Food. Bevier and Van Meter. Whitcomb and Barrows. 1915. $.75.
Cooking for Two. Hill. Little, Brown. 1909. $1.50.
Fireless Cook Book. Mitchell. Doubleday, Page. 1909. $1.25.
Proper Feeding of the Family. Gibbs. New York Association for Improving Condition of Poor. 1911. $.25.
Mrs. Rorer's New Cook Book. Rorer. Arnold. 1903. $2.00.
What to Have for Dinner. Farmer. Dodge. 1905. $1.50.
What to have for Luncheon. Lincoln. Dodge. 1904. $1.25.
Foods and Cookery. Mattison and Newlands. Macmillan. 1916. $1.50.
How to Cook for Sick and Convalescent. Sachse. Lippincott. 1910. $1.25.
The Science of Home-making. Pirie. Scott, Forsman. 1915. $.90.
Everyday Foods in War Time. Rose. Macmillan. 1918. $.80.
One Hundred Portion War Time Recipes. Nettleton. Lippincott. 1918. $1.00.
Food and the War. United States Food Administration. Houghton Mifflin. $.80.

The Party Book By Winnifred Fales & Mary Northend 3.11

### (2) Cleaning, Hygiene, and Sanitation

Chemistry of Cooking and Cleaning. Richards and Elliott. Whitcomb and Barrows. 1907. $1.00.
Home Economics. Parloa. Century. 1910. $1.50.
Cost of Cleanness. Richards. John Wiley and Sons. 1908. $1.00.
House Sanitation. Talbot. Whitcomb and Barrows. New edition, 1917. $.80.
Dust and Its Dangers. Prudden. G. P. Putnam's Sons. 1910. $1.00.
Bacteria, Yeasts, and Molds in the Home. Conn. Ginn. 1917. $1.00.
Rural Hygiene. Ogden. Macmillan. 1911. $1.50.
Story of Germ Life. Conn. Appleton. 1914. $.50.

Principles of Hygiene. Bergey. Saunders. 1918. $3.50.
Chapter in Pyle's "Personal Hygiene" on "Domestic Hygiene." Bergey. Saunders. 1912. $1.50.
The House Fly, Disease Carrier. Howard. Stokes. 1911. $1.60.
Fuels of the Household. White. Whitcomb and Barrows. 1911. $.75.
Civics and Health. Allen. Ginn. 1909. $1.25.
The Housekeepers' Handbook of Cleaning. MacLeod. Harpers. 1915. $1.15.
Bulletins on Household Pests. Bureau of Entomology, Washington, D. C. Free.
The Care of a House. Clark. Macmillan. 1912. $1.50.
Household Bacteriology. Elliott. American School of Home Economics. 1907. $1.25.
The Sanitation of a Country House. Bashore. Wiley. 1905. $1.00
Sanitation in Daily Life. Richards. Barrows. 1907. $.60.
Home and Community Hygiene. Broadhurst. Lippincott. 1918. $2.00.
The Healthful Farmhouse. Dodd. Whitcomb and Barrows. 1911. $.60.

### (3) Care and Feeding of Infants and Children

(See also Nutrition)

The Care and Feeding of Children. Holt. Appleton. 1915. $.75.
Theory and Practice of Infant Feeding. Chapin. Wood. 1909. $2.25.
Practical Motherhood. Campbell. Longmans. 1910. $2.50.
Care of the Baby. Griffith. Saunders. 1915. $1.50.
The Care and Feeding of Children. Rose. Cornell Reading Course. 1910.
Food for Young Children. Hunt. Farmers' Bulletin No. 717. 1916. United States Department of Agriculture.
Feeding of Young Children. Rose. Teachers College Bulletin. Bureau of Publications. January 14, 1911. $.10.
The Daily Meals of School Children. Hunt. Bulletin United States Bureau of Education. 1909. No. 3. $.10.
Food for School Boys and Girls. Rose. Teachers College Bulletin. Bureau of Publications. February 14, 1914. $.10.
Feeding the Family. Chaps. V and X. Rose. Macmillan. 1917. $2.10.
Care of Children Series. Children's Bureau, Department of Labor Washington, D. C.

School Lunches. Hunt. Farmer's Bulletin No. 712, United States Department of Agriculture.

Annual Reports of the Children's Bureau. Department of Labor, Washington, D. C.

School Feeding. Bryant. Lippincott. 1913. $1.50.

The Feeding of School Children. Buckley. A. Bell and Sons. London.

Standard Dietary for an Orphanage. Jaffa. California State Board of Charities and Corrections. 1915.

Dietary Study in a Children's Hospital. Rose and Jacobson. Teachers College Bulletin.

The Penny Lunch. Maury and Tachau. Standard Press. Louisville, Kentucky. 1915. $.50.

Save the Babies. Holt and Shaw. American Medical Association. Chicago, Illinois. 1915. $.05 pamphlet.

Farmers' Bulletins, United States Department of Agriculture, Washington, D. C.

### (4) Foods: Functions, Sources, Manufacture

Air, Water, and Food. Woodman and Norton. John Wiley and Sons. 1914. $2.00.

The Book of Wheat. Dowdlinger. Orange Judd and Co. 1910. $2.00.

Cane Sugar. Noel Deerr. Norman Rodger. 1911. $6.80.

The Modern Packing House. Wilder. Nickerson. 1905. $10.00.

The Milk Question. Rosenau. Houghton Mifflin. 1912. $2.25.

Canning and Preserving. Duckwall. Van Ostrand. 1907. $5.00.

Cocoa and Chocolate. Whymper. Blakiston. 1911. $6.00.

The World's Commercial Products. Freeman and Chandler. Ginn. 1911. $3.00.

Foods and Their Adulterations. Wiley. P. Blakiston. 1917. $4.00.

Human Foods and Their Nutritive Value. Snyder. Macmillan. 1908. $1.25.

How the World Is Fed. Carpenter. American Book. 1907. $.60.

Manual of Practical Hygiene. Harrington. Lea Bros. 1914. $5.00.

Outlines of Industrial Chemistry. Thorp. Macmillan. 1916. $3.75.

Government Bulletins.

Food Products. Sherman. Macmillan. 1914. $2.40.

Food Industries. Vulte and Vanderbilt. Chemical Publishing Co. Easton, Pennsylvania. New Edition, 1916. $2.00.

Handbook of Commercial Geography. Chisholm. Longmans. 1911. $4.80.

Source, Chemistry, and Use of Food Products. Bailey. P. Blakiston's. Philadelphia. 1914. $1.60.

Milk and Its Products. Wing. Macmillan. 1913. $1.50.

Food, What It Is and Does. Greer. Ginn. 1915. $1.00.

Milk and Milk Products in the Home. Nickels. Farmingdale. 1915. Published by author.

How We Are Fed. Chamberlain. Macmillan. 1903. $.40.

How We Are Clothed. Chamberlain. Macmillan. 1904. $.40.

Food Materials and Their Adulterations. Richards. Whitcomb and Barrows. 1906. $1.00.

Drinking Water and Ice. Prudden. Putnam. $.75.

Food in Health and Disease. Davis. Blakiston. 1912. $3.50.

The Food Problem. Kellogg and Taylor. Macmillan. 1917. $1.25.

The World's Food. Annals of the American Academy of Political and Social Science. 1917. $1.00.

### (5) Household Furnishing

The Furniture of Our Forefathers. Esther Singleton. Doubleday, Page. 2 vols. 1913. $1.50.

The Old Furniture Book. Moore. Stokes. 1903. $2.15.

Decorative Styles and Periods. Candee. Stokes. 1906. $2.50.

The Old China Book. Moore. Stokes. 1903. $2.15.

The House Dignified. French. Putnam. 1908. $5.00.

Planning and Furnishing the Home. Quinn. Harper. 1914. $1.00.

The Practical Book of Period Furniture. McClure and Eberlein. Lippincott. $5.00.

Furnishing the Home of Good Taste. Throop. McBride, Nast. 1912. $2.00.

Interior Decoration for the Small Home. Rolfe. Macmillan. 1917. $1.25.

Shelter and Clothing. Kinne and Cooley. Macmillan. 1913. $1.10.

The Home and the Family. Kinne and Cooley. Macmillan. 1917. $.85.

Furnishing of a Modest Home. Daniels. Atkinson. 1908. $1.00.

Principles of Home Decoration. Wheeler. Doubleday, Page. 1903. $1.80.

Homes and Their Decoration. French. Dodd. 1903. $3.00.

Chats on Old Furniture. Hayden. Stokes. 1906. $2.00.
Art and Economy in Home Decoration. Priestman. John Lane. 1912. $1.50.
Oriental Rugs. Munford. Scribner. 1902. $7.50.
The Practical Book of Oriental Rugs. Lewis. Lippincott. 1913. $5.00.
Oriental Rug Book. Ripley. Stokes. 1904. $6.00.
How to Know Oriental Rugs. Langton. Appleton. 1904. $2.00.
Our Homes and How to Beautify Them. Jennings. Harrison and Sons. London. 1902.
Theory and Practice of Teaching Art. Dow. Teachers College. New York. 1912. $1.50.
A Color Notation. Munsell. George H. Ellis. 1916. $1.25.
Grammar of Ornament. Jones. Comstock. $18.00.
History of Architecture. Hamlin. Longmans. 1895. $2.00.
Homes in City and Country. Sturges and Others. 1893. $2.00.
The Country House. Hooper. Doubleday, Page. 1913. $1.50.
Period Furnishings. Clifford and Lawton. 1915. $5.00.
Interior Decoration. Parsons. Doubleday, Page. 1915. $3.00.
Successful Houses and How to Build Them. White. Macmillan. 1912. $2.00.
The Healthful Farm House. Dodd. Whitcomb and Barrows. 1911. $.60.

### (6) Household Management

Foods and Household Management. Kinne and Cooley. Macmillan. 1913. $1.10.
The Cost of Food. Richards. Wiley. 1913. $1.00.
The Cost of Shelter. Richards. Wiley. 1905. $1.00.
The Cost of Living. Richards. Wiley. 1905. $1.00.
Art of Right Living. Richards. Whitcomb and Barrows. Boston. 1904. $.50.
The Modern Household. Talbot and Breckenridge. Whitcomb and Barrows. 1913. $1.00.
Increasing Home Efficiency. Bruère. Macmillan. 1912. $1.50.
How to Keep the Household Accounts. Haskins. Harpers. 1903. $1.00.
Domestic Service. Salmon. Macmillan. 1901. $2.00.
The Efficient Kitchen. Child. McBride, Nast. 1914. $1.25.
Family Expense Account. Brookman. Heath. 1914. $.60.

Household Economics. Campbell. Putnam. 1907. $1.50.
The House. Bevier. American School Home Economics. 1907. $1.50.
Household Management. Terrill. American School Home Economics. 1910. $1.50.
Home Economics. Parloa. Century. 1906. $1.50.
Textiles. Woolman and McGowan. Macmillan. 1913. $2.00.
How We Are Sheltered. Chamberlain. Macmillan. 1906. $.40.
Care of a House. Clark. Macmillan. 1912. $.50.
The Healthful Farmhouse. Dodd. Whitcomb and Barrows. 1911. $.60.
The Fuels of the Household. White. Whitcomb and Barrows. 1909. $.75.
Housekeeping Notes. Kittredge. Whitcomb and Barrows. 1911. $.80.
Economics. Fetter. Century. 1915. $1.75.
The Woman Who Spends. Bertha J. Richardson. Whitcomb and Barrows. 1910. $1.00.
The Economic Function of Woman. Devine. Teachers College Bulletin. $.10.
Home Problems from a New Standpoint. Hunt. Whitcomb and Barrows. Boston. 1908. $1.00.
The Home and Its Management. Kittredge. Century. 1917. $1.50.
A Survey of Your Household Finances. Andrews. Teachers College Bulletin. 1914. $.10.
The Business of the Household. Taber. Lippincott. 1918. $2.00.
A Manual of Homemaking. Van Rensselaer, Rose, and Cannon. Macmillan. 1919. $2.25.

### (7) Home Nursing

Home Nursing. McDonald. Macmillan. 1909. $.80.
Notes on Nursing. Nightingale. Appleton. 1911. $.75.
Primary Nursing Technique. McIsaac. Macmillan. 1907. $1.25.
Red Cross Textbooks. Elementary Hygiene and Home Care of the Sick. Delano. Blakiston. 1913. $1.00 and $.50 (paper).
First Aid. Lynch. American Red Cross. 1917. $.30 and $.75.
Disease and Its Causes. Councilman. Holt. 1913. $.50.
Scientific Features of Modern Medicine. Lee. Columbia Lectures. Lemcke. 1911. $1.50.
Health and Disease. Mackenzie. Holt. 1911. $.75.
Conquest of Nerves. Courtenay. Macmillan. 1913. $1.25.

The Health Master. Adams. Houghton Mifflin. 1913. $1.35.
Preventive Medicine and Hygiene. Rosenau. Appleton. 1916. $6.00.
Practical Motherhood. Campbell. Longmans. 1910. $2.50.
Studies in Invalid Occupation. Tracy. Whitcomb and Barrows. 1910. $1.50.
Occupations for Little Fingers. Sage and Cooley. Scribner. 1905. $1.00.
Hygiene of the Mind. Clouston. Dutton. 1907. $2.50.
Girl and Woman. Latimer. Appleton. 1913. $1.50.
Home Hygiene. Ditman. Duffield. 1912. $1.50.
Medical Dictionary. Black. Macmillan. 1914. $2.50.
The Prevention of Disease. Winslow. Saunders. 1916. $1.75.
Layman's Handbook of Medicine. Cabot. Houghton Mifflin. 1916. $2.00.
Practical Nursing. Maxwell and Pope. Putnam. 1914. $2.00.
Home Nursing. Shaw. Appleton. 1911. $1.75.
Cook Book for Nurses. Hill. Whitcomb and Barrows. 1911. $.75.
Home Care of the Sick. Amy Pope. American School of Home Economics. Chicago. 1912. $2.00.
Food and Cooking for the Sick and Convalescent. Farmer. Little, Brown. 1912. $1.60.
A Textbook of Home Nursing. Harrison. Macmillan. 1918. $1.00.

### (8) Laundering

Laundering. Balderston. Published by author. 1224 Cherry Street, Philadelphia. 1914. $1.25.
Laundry Work in Theory and Practice. Marsh. Longmans. 1914. $.75.
A Guide to Laundry Work. Chambers. Boston Cooking School Magazine Co. 1915. $.75.
Approved Methods of Home Laundering. Mary Vail. Proctor and Gamble Booklet. 1906. Free.
The Science of Laundry Work. Rankin. Blackie and Son Limited. 1912. $.50.
Laundry Work. Shepard. Webb Publishing Co. 1902. $.70.
The Laundry. Rose. Cornell Reading Course. 1909. Ithaca, New York. Free to residents of New York State.
Dry Cleaner, Scourer, and Dyer. Brannt. Baird. 1911. $2.50.
Simple Directions for Laundress. Wadham. Longmans. $.50.
Methods of Textile Chemistry. Dannereth. Wiley. 1908. $2.00.
Housewifery. Balderston. Lippincott. 1919. $2.00.

## (9) Nutrition

(See also Care and Feeding of Children)

Everyday Foods in War Time. Rose. Macmillan. 1918. $1.00.
Fundamental Basis of Nutrition. Lusk. Yale Press. $.50.
Nutritional Physiology. Stiles. Saunders. 1918. $1.50.
Chemistry of Food and Nutrition. Sherman. Macmillan. 1918. $2.00.
Food Products. Sherman. Macmillan. 1914. $2.25.
Feeding the Family. Rose. Macmillan. 1916. $2.10.
Laboratory Handbook for Dietetics. Rose. Macmillan. 1912. $1.10.
The Cost of Food. Richards. Wiley. 1913. $1.00.
Principles of Human Nutrition. Jordan. Macmillan. 1912. $1.75.
Food for the Worker. Stern and Spitz. Whitcomb and Barrows. 1917. $1.00.
Dietetics for Nurses. Friedenwald and Ruhrah. Saunders. 1917. $1.50.
Diet in Health and Disease. Friedenwald and Ruhrah. Saunders. 1913. $4.00.
Dietary Study in a Children's Hospital. Rose. Teachers College. 1912. $.10.
An Adequate Diet. Stiles. Harvard University Press. 1916. $.50.
Food and Nutrition. Bevier. Whitcomb and Barrows. 1915. $1.00.
Foods and Household Management. Kinne and Cooley. Macmillan. 1914. $1.10.
Food and Health. Kinne and Cooley. Macmillan. 1916. $.65.
Food Facts for the Housewife. Bureau of Publications. Teachers College. $.05.
Analysis and Cost of Ready to Serve Foods. Lusk and Gephart. American Medical Association. Chicago. Pamphlet. 1915. $.10.
Food and Cookery for the Sick and Convalescent. Farmer. Little, Brown. 1913. $1.50.
Lessons in the Proper Feeding of the Family. Gibbs. New York Association for Improving Condition of the Poor. 105 East 22 Street, New York. $.25.
Elements of Science of Nutrition. Lusk. Saunders. Philadelphia. 1917. $4.50.

### (10) Science

(See also Cleaning and Sanitation)

Household Physics. Butler. Whitcomb and Barrows. 1914. $1.30.
Physics of the Household. Lynde. Macmillan. 1914. $1.25.
Elements of General Science. Caldwell and Eikenberry. Ginn. 1918. $1.28.
An Introduction to Science. Clark. American Book. 1915. $1.20.
The First Year of Science. Hessler. Sanborn. 1915. $1.25.
How It Is Made. Williams. Nelson. 1908. $1.35.
How It Works. Williams. Nelson. 1907. $1.35.
Household Bacteriology. Elliott. 1910.
Manual of Practical Hygiene. Harrington. Lea. 1914. $5.00.
Chemistry of the Household. Dodd. American School of Home Economics. Chicago. 1912. $2.00.
Elementary Study of Chemistry. McPherson and Henderson. Ginn. 1917. $1.60.
Household Chemistry. Vulte. Chemical Publishing Co. Easton, Pennsylvania. 1917. $1.50.
Bacteria, Yeasts, and Molds in the Home. Conn. Ginn. 1917. $1.00.
The Human Mechanism. Hough and Sedgwick. Ginn. 1918. $2.00.
The Human Body. Martin. Holt. 1917. $2.75.
Rural Hygiene. Ogden. Macmillan. 1911. $1.50.
Elementary Chemistry and Manual of Chemistry. Godfrey. Longmans. 1909. $1.25.
Mechanics of the Household. Keene. McGraw. 1918. $2.50.
Elementary Household Chemistry. Snell. Macmillan. 1914. $1.25.
Manual of Personal Hygiene. Pyle. Saunders. 1917. $1.75.
Human Physiology. Stiles. Saunders. 1916. $1.50.
Home and Community Hygiene. Broadhurst. Lippincott. 1918. $2.00.

### (11) Sewing and Dressmaking, Millinery, and Needlecraft

Shelter and Clothing. Kinne and Cooley. Macmillan. 1913. $1.10.
Dressmaking. Fales. Scribner. New York. 1917. $1.50.
Clothing for Women. Baldt. Lippincott. 1916. $2.00.
School Needlework. Hapgood. Ginn. $.75.
Complete Dressmaker. Laughlin. Appleton. 1916. $1.35.
Dressmaking Up-to-Date. Butterick Publishing Co. $.25.

Dress Cutting, Drafting, etc. M. Prince Brown.
Color, Dress, and Needlework. Lucy Crane.
Art in Needlework. Day and Buckle. Scribner. 1914. $2.50.
Embroidery Up-to-Date. Butterick Publishing Co. New York.
Progressive Lessons in Needlework. Johnson. Heath. 1893. $.90.
Encyclopedia of Needlework. Dillmont. Dornach. Alsace.
Columbia Book of the Use of Yarns, Crocheting, etc. Horstman. New York. $.25.
Home Millinery Lessons. Tobey. Current numbers of McCalls Magazine.
Occupations for Little Fingers. Sage and Cooley. Scribner. 1905. $1.00.

### (12) Textiles and Clothing

Shelter and Clothing. Kinne and Cooley. Macmillan. 1913. $1.10.
Textiles and Clothing. Watson. American School Home Economics. Chicago. 1912. $2.00.
How We Are Clothed. Chamberlain. Macmillan. 1904. $.50.
How the World Is Clothed. Carpenter. American Book. 1907. $.60.
Methods of Textile Chemistry. Dannereth. Wiley. New York. 1908. $2.00.
Textiles. Dooley. Heath. 1914. $1.25.
Textiles. Woolman and McGowan. Macmillan. 1913. $2.00.
Textile Fibers. Matthews. Wiley. New York. 1913. $4.00.
Textiles. Nystrom. Appleton. 1916. $1.50.
Household Textiles. Charlotte Gibbs. Whitcomb and Barrows. 1912. $1.25.
Coloring Matters for Dyeing Textiles. McKay. 1906. $1.00.
What Dress Makes of Us. Quigley. Dutton. New York. 1897. $1.25.
Two Centuries of Costume in America. Alice Morse Earle. Macmillan. 1910. $2.50.
English Costume. Calthorp. London. Black. 1908. $1.25.
Home Life in Colonial Days. Alice Morse Earle. Macmillan. 1913. $2.50.
Principles of Correct Dress. Winterburn. Harper. 1914. $1.00.
History of Costume. Racinet. 6 vols. Text in French. De Firmin-Didot. 1888.
Ten Centuries of Toilette. A. Robida. Scribner. $1.50.
Clothing and Health. Kinne and Cooley. Macmillan. 1916. $.65.

Lace, Its Origin and History. Goldenberg. Brentano. New York. 1904. $1.50.
Hand Loom Weaving. Hooper. Macmillan. 1910. $2.25.
The Story of the Cotton Plant. Wilkinson. Appleton. 1915. $.50.
Cotton Spinning. Marsden. Macmillan. 1891. $1.75.
Cotton Weaving. Marsden. Macmillan. 1895. $3.00.
Cotton Manufacturing. Posselt. Baird. Philadelphia. 2 vols. 1903. $3.00.
A Cotton Fabric Glossary. Bennet. 757 Broadway, New York. 1914. $5.00.
Textiles and Clothing. McGowan and Waite. Macmillan. 1919. $1.10.
Clothing for Women. Baldt. Lippincott. 1916. $2.00.
Cyclopedia of Textile Work. American School of Correspondence. 1907. $19.80.
Art in Dress, with Notes on Home Decoration. Bolman and McNutt. Manual Arts Press. Peoria. 1918. $.50.
Historic Dress in America. McClellan. Jacobs. 1910. $6.00.
Cotton as a World Power. James. Scherer. 1916. $2.00.
The American Cotton Industry. Young. Scribner. 1903. $.75.
Linen, How It Grows. National Flax Fiber Co. Free.
Linen Trade, Ancient and Modern. Warden. Longmans.
Silk Industry in America. Buchett. Van Nostrand. 1876. Out of print.
Rearing Silk Worms. Williams. Whitaker. $1.25.
Silk Manufacture in the United States. W. Wyckoff. Van Nostrand. $1.00.
Silk Manufacture and Its Problems. Chittick. J. Chittick. 1913. $2.50.
Silk. The Corticelli Silk Mills. Florence, Massachusetts.
Silk and Manufacture of Silks. Schedule L. Tariff Information Series No. 3, United States Tariff Commission, Washington, D. C.
From Wool to Cloth. American Woolen Co. American Woolen Co. Boston. 1911.
Wool Manufacture. Beaumont. Bell. London. 1890. $1.75.
The Structure of the Wool Fiber. Bowman. Palmer and Howe. 1908. $2.60.
Spinning Woolen and Worsted. McLaren. Cassell. 1890. $1.00.
From Wool to Cloth. Shaw. American Woolen Co. Free.
Woolen Spinning. Vickerman. Macmillan. $1.75.

The Methods of Textile Chemistry. Dannereth. Wiley. 1908. $2.00.
Textile Fabrics, Weaving and Designing. Simpkin. London. 1879. Out of print.
Dyes and Dyeing. Pellew. McBride. 1913. $2.00.

## III. TEXTBOOKS IN HOME ECONOMICS FOR USE OF PUPILS IN ELEMENTARY AND SECONDARY SCHOOLS

### (1) Elementary Schools

Elements of the Theory and Practice of Cookery. Williams and Fisher. Macmillan. $1.00.
Household Science and Arts. Morris. American Book. 1913. $.60.
Practical Homemaking. Kittredge. Century. 1904. $.70.
Food and Health. Kinne and Cooley. Macmillan. 1916. $.65.
Clothing and Health. Kinne and Cooley. Macmillan. 1916. $.65.
The Home and the Family. Kinne and Cooley. Macmillan. 1917. $.85.
Household Arts for Home and School. 2 vols. Cooley and Spohr. Macmillan. 1919.
Lessons in Elementary Cooking. Jones. Boston Cooking School Magazine. 1913. $1.00.
Handbook of Home Economics. Flagg. Little, Brown. 1912. $.75.
Rural Arithmetic. Calfee. Ginn. 1913. $.30.
Vocational Mathematics for Girls. Dooley. Heath. 1917. $1.28.
Industrial Arithmetic for Girls' Trade Schools. Gardner and Murtland. Heath. 1910. $.60.
Domestic Science Textbooks. Austen. Lyons and Carnahan. 1915. $.72, $.72, $1.50.
Food Problems. Farmer and Huntington. Ginn. $.30.

### (2) Secondary Schools

Foods and Household Management. Kinne and Cooley. Macmillan. 1914. $1.10.
Shelter and Clothing. Kinne and Cooley. Macmillan. 1913. $1.10.
Food Study. Wellman. Little, Brown. 1917. $1.00.
A Laboratory Manual of Foods and Cookery. Matteson and Newlands. Macmillan. 1916. $1.50.

A Text-book of Domestic Science. Campbell. Macmillan. 1913. $.90.
Foods and Sanitation. Forster and Weigley. Row, Peterson. 1914. $1.00.
Principles of Food Preparation. Chambers. Boston Cooking School Magazine. 1914. $1.00.
A Study of Foods. Wardall and White. Ginn. 1914. $.70.
Domestic Science Principles and Applications. Bailey. Webb Publishing Co. 1914. $1.00.
Textbook of Cooking. Greer. Allyn and Bacon. 1915. $1.25.

### (3) Home-making Books for Little Girls

Longman's Household Science Readers. Longmans. 1901. $.42.
Housekeeping for Little Girls. Foster. Duffield. New York. 1912. $.75.
Sewing for Little Girls. Foster. Duffield. 1911. $.75.
Work and Play for Little Girls. Levi. Duffield. 1912. $.75.
The Home and the Family. Kinne and Cooley. Macmillan. 1917. $.85.
Clothing and Health. Kinne and Cooley. Macmillan. 1916. $.65.
Food and Health. Kinne and Cooley. Macmillan. 1916. $.65.
When Mother Lets Us Give a Party. Yale. Moffat. 1909. $.75.
Mary Frances Cook Book. Fryer. Winston. Philadelphia. $1.50.
Mary Frances Sewing Book. Fryer. Winston. Philadelphia. $1.50.
Mary Frances Housekeeper. Fryer. Winston. Philadelphia. $1.50.
When Mother Lets Us Help Johnson. Moffat. 1909. $.75.
When Mother Lets Us Cook. Johnson. Moffat. 1908. $.75.
Training the Little Home-maker by Kitchen Garden Methods. Keech. Lippincott. 1912. $1.00.
When Mother Lets Us Make Candy. Bache. Moffat. 1915. $.75.

## IV. GOVERNMENT AND STATE PUBLICATIONS

Many of the publications of the various departments of the government may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., when it is not possible to obtain them from the various departments. Price lists of the Department of Agriculture Publications may also be secured.

### (1) Department of the Interior

Publications of the Bureau of Education. Have name put on permanent mailing list for monthly Record of Current Educational Publications.

Division of Home Economics, Bureau of Education, Mrs. Henrietta Calvin, Director. Have name placed on mailing list for home economics letters, etc. First issue, October, 1915.

Home Education Bureau, Bureau of Education. Reading Courses for Parents. Bulletins on the Care of the Baby.

Bureau of Mines. List of publications may be obtained. Saving Fuel in a House, Sanitation, and other publications of interest.

### (2) Department of Labor

Children's Bureau, issues list of publications.

### (3) Department of Agriculture

Have name placed on mailing list for monthly publications.

The Farmers Bulletins are issued by this department.

Agricultural Experimental bulletins.

Health, Disease, and Sanitation bulletins.

Chemistry Bureau bulletins.

Publications of the States Relations Service, A. C. True, Director.

Publications of Office of Home Economics of the States Relations Service, C. F. Langworthy, Chief.

### (4) Department of the Treasury

United States Public Health Service.

Publications of interest in nutrition, thrift, and sanitation.

### (5) Department of Commerce

Bureau of Standards. (Bulletin 55) Measurements for the Household, and other bulletins.

### (6) Federal Board for Vocational Education, Washington, D. C.

Bulletins in relation to vocational home-making and other phases of vocational education.

## V. MAGAZINES AND PERIODICALS

The Journal of Home Economics. Published at 1211 Cathedral St., Baltimore, Maryland. $2.00.

The Manual Training Magazine. Manual Arts Press. Peoria, Illinois. $1.25.

The Delineator. Butterick Publishing Co., New York. $1.50.

The House Beautiful. 3 Park St., Boston, Massachusetts. $2.50.

The Schools Arts Magazine. School Arts Publishing Co. Boston. $2.00.

Good Housekeeping Magazine. 119 West 40 Street, New York City. $1.50.

American Cookery Magazine. Published by Boston Cooking School Magazine. Boston. $1.50.

International Studio. John Lane. New York City. $5.00.

Manual Training and Vocational Education. Manual Arts Press. Peoria, Illinois. $1.25.

Country Life. Doubleday, Page, & Co. New York. $5.00.

House and Garden. McBride, Nast, & Co. $3.00.

Ladies' Home Journal. Curtis Publishing Co. Philadelphia, Pennsylvania. $1.50.

Outlook. Outlook Co., 381 Fourth Avenue, New York City. $4.00.

The Survey. 112 East 19 Street, New York City. $3.00.

The Housewives' League Magazine. 405 Lexington Avenue, New York City. $2.00.

Vogue. Conde and Nast. 19 West 44 Street, New York City. $5.00.

The Elite. 71 Suffolk St., New York City.

Bon Ton. Taylor Publishing Co. 16 West 39 Street, New York City. $3.50.

The Farmer's Wife Journal. Webb Publishing Co. St. Paul, Minnesota.

School Review. University of Chicago Press. $1.50.

Educational Review. Columbia University. New York City. $3.00.

## VI. PUBLICATIONS OF COLLEGES AND ASSOCIATIONS

American Home Economics Association. 1211 Cathedral Street, Baltimore, Maryland.

National Education Association. 1400 Massachusetts Ave., Washington, D. C. Headquarters. $2.00.

National Society for Vocational Education. 140 West 42 Street, New York City.

Teachers College Record and Bulletins. Teachers College, Columbia University, New York City. Send for price list.

The Cornell Reading Courses. Cornell University, Ithaca, New York. Reading Courses for the Farm Home.

University of Illinois. Address, F. H. Rankin, Urbana, Illinois. Send for price list of bulletins such as Syllabus of Domestic Science and Domestic Art for High Schools of Illinois.

All State Universities and Agricultural Colleges. Bulletins of various kinds.

The Russell Sage Foundation. Publications. Send for list. 130 East 22 Street.

National Child Labor Committee, 105 East 22 Street, New York City. Pamphlets on Child Labor, Child Welfare in Tenements, etc. Send for price list.

National Consumers' League, 105 East 22 Street, New York City. Send for list of publications and price. Pamphlets such as Home Work in Tenements, etc.

The Housekeeping Experiment Station, 28 Hoyt Street, Stamford, Connecticut. Bulletins on comfort in the kitchen, the kitchenette, time and money savers, etc.

# PART V

## ADDENDA

# ADDENDA

## *COURSES OF STUDY*

## WASHINGTON IRVING HIGH SCHOOL, NEW YORK CITY

### General Four-year or Academic Course of Study

#### FIRST YEAR

| | Pds. per Wk. |
|---|---|
| *English I | 5 |
| Latin I, Spanish I, or French I | 5 |
| Mathematics I, Algebra | 5 |
| Science I, Biology, including Botany, Zoölogy, and Physiology | 5 |
| *Drawing I | 2 |
| *Music I | 1 |
| *Physical Training I | 2 |
| *Elocution I | 1 |

#### SECOND YEAR

| | Pds. per Wk. |
|---|---|
| *English II | 3 |
| Latin II, [1] German II, French II, or Spanish II | 5 |
| Mathematics II, Plane Geometry | 5 |
| History I (Modern History, Pt. 1) | 3 |
| Italian I, Spanish I, or French I | 5 |
| Science II, Chemistry | 5 |
| *Drawing II | 2 |
| *Music II | 1 |
| *Physical Training II | 2 |
| Sewing | 5 |

#### THIRD YEAR

| | Pds. per Wk. |
|---|---|
| *English III | 3 |
| Latin III, [1] German III, French III, or Spanish III | 5 |
| *[2] History II (Modern History, Pt. II) | 3 |

[1] For those who elected German prior to September, 1918.

[2] Pupils not candidates for Training School who graduate before June, 1920, are not required to take Modern History, Pt. II.

| | |
|---|---|
| Science III, Physics | 5 |
| Mathematics III, Algebra, Review and Advance | 2 |
| Italian II, [1] German II, French II, or Spanish II | 5 |
| Music III | 1 |
| Drawing III | 2 |
| *Physical Training | 2 |
| Millinery and Sewing | 5 |

FOURTH YEAR

| | Pds. per Wk. |
|---|---|
| *English IV | 4 |
| Latin IV, [1] German IV, French IV, or Spanish IV | 4 |
| Italian III, [1] German III, French III, or Spanish III | 5 |
| Science VI, Physiography | 5 |
| *History III, American History and Civics, Related English History | 4 |
| Domestic Science I | 5 |
| Music IV | 1 |
| Drawing IV | 5 |
| *Physical Training IV | 2 |
| *Elocution II | 1 |

*General Provisions*

1. Students following this course shall present for graduation the satisfactory completion of the required work in subjects *starred* above and enough work in elective subjects to make the total credit for work done 16 or 17 points.

THREE-YEAR COMMERCIAL COURSE, WITH OPTIONAL FOURTH YEAR (NEW)

FIRST YEAR

| | Required Pds. per Wk. |
|---|---|
| English | 5 |
| Physical Training | 2 |
| Elocution | 1 |
| Music | 1 |
| Drawing | 2 |
| Physiology and Hygiene | 1 |
| Domestic Science and Art | 4 |
| Arithmetic | 2 |
| Business Forms, Bookkeeping, and Penmanship | 5 |
| | 23 |

[1] For those who elected German prior to September, 1918.

| | |
|---|---|
| Assembly | 2 |

| | Elective Pds. per Wk. |
|---|---|
| French, Italian, or Spanish | 5 |

The work is the same for the first year, whether pupils elect the Bookkeeping, or the Stenography, Typewriting, and Office Practice Branch of the course.

### Three-year Vocational Home-making Course, with Optional Fourth Year

This course offers unusual opportunities for the study of domestic science. The equipment for this work in our school is unexcelled in any other school in the city and we are prepared to give a thorough course, preparing for managerial positions in homes, hotels, and tea rooms, canteens and hospitals. Pupils are invited to take up this work on account of its economic as well as its patriotic value.

### Three-year Course in Dressmaking, Costume Design, and Embroidery, with Optional Fourth Year (New)

N. B. — Pupils admitted to first-term classes in Dressmaking and Costume Design on or after September, 1918, take work as indicated below.

FIRST YEAR

| | Required Pds. per Wk. |
|---|---|
| English | 5 |
| Physical Training | 2 |
| Elocution | 1 |
| Music | 1 |
| Drawing | 2 |
| Physiology and Hygiene | 1 |
| Domestic Science and Art | 5 |
| Elementary Dressmaking | 5 |
| | 22 |
| Assembly | 2 or 3 |

| | Elective (5 pds.) Pds. per Wk. |
|---|---|
| French, Italian, or Spanish | 5 |

SECOND YEAR

| | Required Pds. per Wk. |
|---|---|
| English | 5 |
| Physical Training | 2 |
| Costume Design and Dressmaking | 20 |
| | 27 |
| Assembly | 2 or 3 |

| | Elective (5 pds.) Pds. per Wk. |
|---|---|
| French, Italian, or Spanish | 5 |
| General Science | 5 |
| History (Modern European) | 5 |
| Elocution II | 5 |
| Music II | 5 |
| Millinery I | 5 |

THIRD YEAR

| | Required Pds. per Wk. |
|---|---|
| English | 5 |
| Physical Training | 2 |
| Costume Design and Dressmaking | 15 |
| American History and Civics | 5 |
| | 27 |
| Assembly | 2 or 3 |

| | Elective (5 pds.) Pds. per Wk. |
|---|---|
| French, Italian, or Spanish | 5 |
| Elocution II or III | 5 |
| Music II or III | 5 |
| Millinery II | 5 |
| Costume Illustration | 5 |
| Dressmaking Elective | 5 |

FOURTH YEAR (OPTIONAL)

| | Required Pds. per Wk. |
|---|---|
| English | 3 |
| Physical Training | 2 |
| Costume Design and Dressmaking | 25 |
| | 30 |

| | Elective (5 pds.) Pds. per Wk. |
|---|---|
| French, Italian, or Spanish | 5 |
| History | 5 |
| Science | 5 |
| Elocution III | 5 |
| Music III | 5 |

### Dressmaking, Costume Design, and Embroidery

Aim. — The aim of this course is to arouse in every girl a love of the subject and, through interest, to develop such habits of efficiency that as home-maker or trade worker she may be a self-reliant, successful woman. It is the purpose of the course to give as much of an insight into the modern processes of the dressmakers' and allied trades as is possible within the limitations of the schoolroom. The methods used follow closely those of best trade practice. Articles and garments are selected in all cases to represent typical and important construction from the technical standpoint.

First Year. — In the first year sewing is taken from the viewpoint of the home. Especial emphasis is placed upon the cutting and construction of simple garments — for example, middy suits, shirt waists, and cotton dresses. Conservation problems in the care of garments, the buying of textiles, and clothing budgets are introduced.

Second Year. — In the second year the technique of the dressmakers' trade is given. Measuring and judging the figure, cutting and fitting waists and skirts, all kinds of trimmings and finishings. The cotton, silk, and wool dresses made must be cut, fitted, decorated, and finished in methods used in the best shops. A thorough drill in what is known as trade embroidery is given, the designs and colors of which are carefully worked out in the Costume Design classes.

Third Year. — In the third year fine hand sewing is reviewed and the dainty needlework of the French seamstress introduced. The particular models on which this work is applied are baby dresses and lingerie waists. Pattern modeling and draping is developed in the first half of this year. Each girl is expected to design and model the pattern for every garment made during this term. The designs are worked up in the Costume Design class, then modeled and draped in the sewing class. Skill in this work grows rapidly and to the girls who show creative talent especial instruction is

given and much practice is allowed. Ability to design and drape is always in demand and is well paid for in the trade.

In the second half of this year special training is given to prepare for the shop and for the home dressmaker. Requests come to the school for embroiderers, pattern-makers, designers, drapers, finishers, and dressmakers by the day. The effort is made to fit each girl for the work to which she is best suited. Every one is speeded up. Power operating is taught, tests for speed and technique are given regularly. Pupils who wish direct trade training are allowed to work in carefully selected dressmaking establishments, following the "in and out" or coöperative plan. These pupils spend one week in school, one week in the shop. The plan has proved most valuable in testing girls and in bringing school and trade together. The girls have made good — they can meet the trade requirements, and by this means have secured excellent positions after graduation.

Throughout the course work on Red Cross garments is regularly given. The girls cheerfully take this opportunity for "doing their bit," and the results are shown, not alone in the thousands of garments, but in a real growth for every worker.

### Three-year Course in Industrial Art, with Optional Fourth Year (New)

N. B. — Pupils admitted to first-term classes in Industrial Art on or after September, 1918, take work as indicated below.

FIRST YEAR

| | Required Pds. per Wk. |
|---|---|
| English | 5 |
| Physical Training | 2 |
| Elocution | 1 |
| Drawing | 2 |
| Music | 1 |
| Physiology and Hygiene | 1 |
| Domestic Science and Art | 5 |
| Elementary Art | 5 |
| | 22 |
| Assembly | 2 or 3 |
| | **Elective (5 pds.) Pds. per Wk.** |
| French, Italian, or Spanish | 5 |

*Industrial Art Course*

This course does not prepare students to be teachers of drawing. Graduation from a four-year academic high school course and from an art course in a regular art school are required of all who wish to become art teachers. The Washington Irving Industrial Art Course is a three-year course, with an optional fourth year, which trains girls to go into technical art work.

First Year of the Industrial Art Course. (Second year in school.)

First Half. — Representative drawing of common objects — flowers, animals, insects, etc., — treated in various technique, in pencil, ink, and color. This term is devoted to teaching how to draw and handle media.

Second Half. — Study of color theory and technique of tempera color. Study of principles of design and derivation of design from natural forms.

Second Year of the Industrial Art Course. (Third year in school.)

The second year of art work is differentiated into (1) Commercial Design; (2) Costume Illustration; (3) Textile Design.

Commercial Design. — The aim of the work is to give a commercial art training for one year along the following lines:

First Half.

1. Study and practice of commercial lettering.
2. Sketches and design units suitable for reproduction in black and white illustration.
3. Illustrated advertisements suitable for newspaper and magazine work, in black and white.

Second Half.

1. General commercial work.
   (*a*) Gift cards.
   (*b*) Menus.
   (*c*) Labels.
   (*d*) Poster stamps.
   (*e*) Tags, etc.
2. General decorative work applied to furniture, box tops, trays, boxes, covers, etc.
3. Simple posters in color; for example, car advertisements and magazine covers.

Costume Illustration. — The aim of the work is to give the student specialized or vocational instruction along these lines.

First Half.

Devoted largely to figure study from the pose, cast, and anatomy.

Costume sketching and illustration are begun this term.

Second Half.

Figure drawing continued, with trade problems in illustration. Each step has a definite application to one of the many practical uses of Costume Illustration, such as newspaper, fashion periodical, pattern and catalogue illustrating, and dressmakers' and manufacturers' sketching.

There is a large commercial field open to women who are able to meet the trade standards.

Textile Design. — The aim of this course is to give the student a knowledge of the history of design and of its practical application.

First Half.

1. Study of historic ornament and work in museum.
2. Study of the theory and principles of design as applied to textiles.
3. Technical work on planning the underlays and how to repeat the pattern.

Second Half.

1. Study of methods of reproduction supplemented by visits to manufacturing firms.
2. Specialized work in planning patterns for printing shirtings, silk, cretonnes, etc., and in planning patterns that are to be woven.

## THE BOARD OF PUBLIC EDUCATION, PHILADELPHIA

### *COURSES OF STUDY IN HIGH SCHOOLS FOR GIRLS*

#### Information Applying to all Courses

The subjects in Roman type are required of all pupils; those in Italics are elective with the principal's approval. The standard amount of work required is 25 periods per week of at least 20 units' value. One period per week of "prepared" work, or two periods of "unprepared" work, taken for a year, or the equivalent thereof, constitutes a unit. Drawing, physical education, music, household arts (except cooking in the fourth year of the Home Economics Course), penmanship, and typewriting are "unprepared" subjects.

For graduation a pupil must earn at least 80 units. These 80 units must include the work prescribed for graduation in the course the pupil is pursuing, and a sufficient number of additional units in subjects chosen with the approval of the principal to make the required total. A pupil who has taken the prescribed subjects of a course and has met the 80-unit requirement may freely elect subjects from any course.

## Academic Course

### FIRST YEAR

| | 1st Term | 2d Term |
|---|---|---|
| Drawing | 2 | 2 |
| English | 5 | 5 |
| French, German, Latin, or Spanish | 5 | 5 |
| Mathematics, General | 5 | – |
| Mathematics, Algebra | – | 5 |
| Music | 1 | 1 |
| Physical Education | 2 | 2 |
| Science, Introductory | 5 | 5 |

### SECOND YEAR

| | | |
|---|---|---|
| *Drawing* | 2 | 2 |
| English | 5 | 5 |
| [1] Foreign Language | 5 | 5 |
| History, Ancient | 4 | – |
| History, English I | – | 4 |
| *Household Arts* | 2 | 2 |
| Mathematics, Algebra | 3 | – |
| Mathematics, Geometry | – | 3 |
| Physical Education | 2 | 2 |
| Science, Biology | 4 | 4 |

### THIRD YEAR

| | 1st Term | 2d Term |
|---|---|---|
| *Drawing* | 2 | 2 |
| English | 4 | 4 |
| [1] *Foreign Language* | [2] 5 or 4 | 5 or 4 |
| History, English II | 4 | – |
| History, Modern European | – | 4 |
| *Household Arts* | 2 | 2 |
| *Mathematics, Geometry* | 5 | 5 |
| Music | 1 | 1 |
| Physical Education | 2 | 2 |
| *Science, Chemistry* | 4 | 4 |

### FOURTH YEAR

| | | |
|---|---|---|
| *Drawing* | 2 | 2 |
| *Economics* | 4 | 4 |
| *English* | 4 | 4 |
| [1] *Foreign Language* | [2] 5 or 4 | 5 or 4 |
| *History, Amer. and Civics* | 4 | 4 |
| *Mathematics, Algebra* | 3 | – |
| *Mathematics, Arithmetic* | – | 3 |
| *Music* | 1 | 1 |
| Physical Education | 2 | 2 |
| Physiology and Hygiene | 1 | 1 |
| *Science, Physics* | 5 | 5 |

For Admission to the Normal School from the Academic Course the minimum requirements in units are: Drawing 2, English 18, foreign language 14, history 12, mathematics 13 (including the arithmetic of the fourth year), music 1½, physical education 4, physiology and hygiene 1, science 13. Candidates for the normal school may omit four units of history and four units of science, provided they have an equivalent number of units in a second foreign language. A rating of not less than 75 is required in English and arithmetic, and a graduating average of 75.

[1] A pupil who elects a second foreign language should begin it in the second year, and continue both languages throughout the course. Some colleges require two foreign languages for admission. Science or history is the alternative for the second foreign language.

[2] Latin runs five periods a week, French, German, or Spanish four.

## Commercial Course

### First Year

| | 1st Term | 2d Term |
|---|---|---|
| Drawing | 2 | 2 |
| English | 5 | 5 |
| [1] *French, German, Latin or Spanish* | – | 5 |
| *History, General European* | – | 5 |
| Mathematics, General | 5 | – |
| Mathematics, Arithmetic | – | 5 |
| Music | 1 | 1 |
| Physical Education | 2 | 2 |
| Science, Introductory | 5 | 5 |
| Word Study | 5 | – |

### Second Year

| | | |
|---|---|---|
| Bookkeeping | – | 4 |
| Civics | 4 | – |
| Elements of Business | – | 4 |
| English | 5 | 5 |
| [1] *Foreign Language* | 5 | 5 |
| History, English | 4 | 4 |
| *Household Arts* | 2 | 2 |
| Penmanship | 4 | – |
| Physical Education | 2 | 2 |
| *Science, Biology* | 4 | – |
| *Science, Physical* | – | 4 |

### Third Year

| | 1st Term | 2d Term |
|---|---|---|
| Bookkeeping | 4 | 4 |
| *Economics* | – | 4 |
| English | 4 | 4 |
| [1] *Foreign Language* | 5 | 4 |
| *Household Arts* | 2 | 2 |
| *Mathematics, Arithmetic* | 5 | – |
| Physical Education | 2 | 2 |
| *Music* | 1 | 1 |
| [2] Stenography | 5 | 5 |
| Typewriting | 5 | 5 |

### Fourth Year

| | | |
|---|---|---|
| *Bookkeeping* | 5 | 5 |
| *Commercial Geography* | – | 4 |
| *Commercial Law* | 2 | – |
| *Economics* | 4 | – |
| English | 4 | 4 |
| [1] *Foreign Language* | 4 | – |
| *History, Amer. and Civics* | 4 | 4 |
| Office Practice | – | 2 |
| Physical Education | 2 | 2 |
| Physiology and Hygiene | 1 | 1 |
| [2] Stenography | 5 | 5 |
| Typewriting | 5 | 5 |

[1] In the second term of the first year foreign language is elective with history; in the second year with science; in the first term of the third year with mathematics; in the second term of the third and first term of the fourth year with economics.

[2] Under certain conditions to be determined by the principal, other work, including mathematics and bookkeeping, may be substituted for stenography.

## Home Economics Course

| FIRST YEAR | 1st Term | 2d Term |
|---|---|---|
| Drawing | 2 | 2 |
| English | 5 | 5 |
| [1] *French, German, Latin, or Spanish* | – | 5 |
| *History, General European* | – | 5 |
| Mathematics, General | 5 | – |
| Mathematics, Arithmetic | – | 5 |
| Music | 1 | 1 |
| Physical Education | 2 | 2 |
| Science, Introductory | 5 | 5 |
| Word Study | 5 | – |

| SECOND YEAR | 1st Term | 2d Term |
|---|---|---|
| *Civics* | 4 | – |
| Cooking and Domestic Econ. | 2 | 2 |
| Drawing | 2 | 2 |
| Dressmaking and Millinery | 2 | 2 |
| *Elements of Business* | – | 4 |
| English | 5 | 5 |
| [1] *Foreign Language* | 5 | 5 |
| History, English | 4 | 4 |
| Music | 1 | 1 |
| Physical Education | 2 | 2 |
| Science, Biology | 4 | – |
| Science, Physical | – | 4 |

| THIRD YEAR | 1st Term | 2d Term |
|---|---|---|
| Cooking and Domestic Econ. | 4 | 4 |
| Drawing | 4 | 4 |
| Dressmaking and Millinery | 4 | 4 |
| *Economics* | – | 4 |
| English | 4 | 4 |
| [1] *Foreign Language* | 5 | 4 |
| *History, Mod. European* | 4 | – |
| *Music* | 1 | 1 |
| Physical Education | 2 | 2 |
| *Science, Chemistry* | 5 | 5 |

| FOURTH YEAR | 1st Term | 2d Term |
|---|---|---|
| Cooking and Domestic Econ. | 4 | 4 |
| Drawing | 4 | 4 |
| Dressmaking and Millinery | 6 | 6 |
| *Economics* | 4 | – |
| English | 4 | 4 |
| [1] *Foreign Language* | 4 | – |
| History, Amer. and Civics | 4 | 4 |
| *Mathematics, Arithmetic* | – | 4 |
| Physical Education | 2 | 2 |
| Physiology and Hygiene | 1 | 1 |

For Admission to the Normal School from the Home Economics Course the minimum requirements in units are: Civics 2, cooking and domestic economy 5, drawing 5, dressmaking and millinery 4½, English 18,

[1] In the second term of the first year foreign language is elective with history; in the second year, with civics and elements of business; in the first term of the third year, with history; in the second term of the third and first term of the fourth year, with economics.

history 10, mathematics 7, music 1, physical education 4, physiology and hygiene 1, science 14, word study 2½. A rating of not less than 75 is required in English, and a graduating average of 75.

## KENSINGTON HIGH SCHOOL, PHILADELPHIA, PA.[1]

TENTATIVE OUTLINE FOR CONTINUATION CLASSES FOR GIRLS BETWEEN 14–16 YEARS OF AGE, EIGHT HOURS PER WEEK FOR TWO YEARS

Majors I. Commercial.
II. Home Economics.

CURRENT EVENTS

1. Topics of interest to the neighborhood.
2. Current topics pertaining to the city.
3. Important phases of the war:
   *a.* Effect of the war on labor.
      1. Shall strikes be permitted during the war?
      2. If not, how can they be averted?
      3. Shall labor standards be relaxed during the war?
   *b.* Effect of the war on the position of women.
      1. Study of the work done by women in the various countries at war.
   *c.* Problems:
      1. The Food Problem.
      2. The Fuel Problem.
      3. The Transportation Problem.
      4. The Problem of Financing the War.
   *d.* Why we are at war.
   *e.* What we hope to accomplish in this war.

Textbooks: Newspapers, Magazines and the Official Bulletin of the Bureau of Public Information.
National School Service, published by Committee on Public Information, Washington, D. C.

BOOKKEEPING. (Commercial Course.)

1. Elementary Principles:
   *a.* Journalizing.
   *b.* Posting.
   *c.* Trial Balance work.
2. Journalizing, Posting, and Trial Balance work with VOUCHERS.

[1] By permission of Miss Beulah Fennimore, Principal of the Kensington High School, Philadelphia, Pa.

PENMANSHIP

Arm Movement is taught but not insisted upon, the aim being to improve the writing.

HOUSEHOLD ARTS

*Cooking:*

1. Relation of food to health.
2. Selection and cost of food.
3. Preparation of food.

*Sewing:*

1. Clothing and its relation to health.
2. Selection of clothing.
3. Division of income and Personal Budget.
4. Textiles.
5. Making of shirtwaist or separate skirt.

HYGIENE

1. Food Talks prepared by J. Russell Smith.
2. Personal Hygiene.

PHYSICAL TRAINING. (First and second terms)

1. Marching.
2. Free Exercises.
3. Folk Dancing.
4. Games.

TYPEWRITING

The Touch System is taught.

The girls in the Continuation Classes turn out about the same percentage of perfect work as do the girls in the regular classes.

ENGLISH

First Year.

1. Grammar principles.
2. Letter writing.
3. Oral Composition.
4. Reading:
   a. *Ramona.*
   b. *Ivanhoe.*
   c. Books are recommended for outside reading.

Second Year.

1. Sentence construction.
2. Business letters.
3. Personal letters.

4. Reading:
   a. *Adam Bede.*
   b. *David Copperfield.*
   c. *Mother.* Kathleen Norris.
   d. *Twelfth Night.*
   e. *Songs of Cheer.* Riley.
   f. *Rhymes of a Red Cross Man.* Service.

Third Year.

a. *Four Million.* O. Henry.
b. Short Stories.

ARITHMETIC

Commercial Course.

1. Speed work on fundamental operations.
2. Use of aliquot parts of a dollar.
3. Fractions.
4. Decimals.
5. Bills; form and calculations.
6. Commercial discounts.
7. Form of receipt and check.
8. Pay Roll.
9. Interest at 6 per cent and other per cents.
10. Bank discount.

Home Economics Course.

1. Speed work on fundamental operations.
2. Use of aliquot parts of a dollar.
3. Fractions.
4. Decimals.
5. Bills; form and calculations.
6. Distribution of income.
7. Food.
8. Clothing.
9. Problems in dressmaking and millinery.
10. Cost of furnishing a house.
11. Heat and Light.
12. Thrift and Investment.

Texts:

Dooley's *Vocational Mathematics for Girls.*
Van Tuyl's *Commercial Arithmetic.*
Moore's *New Commercial Arithmetic.*

## Tentative Outline of Home Economics Course[1]

*The Kensington High School* is situated in the heart of the textile district of Philadelphia.

The majority of the *pupils* are American born, living in homes where the work of the household is done by members of the family.

The *school* offers all of the high school courses given to girls in Philadelphia.

The above continuation course is given for working girls under sixteen who are required by law to attend school eight hours a week.

### Home Economics Course

This course is planned for those girls who are majoring in Art and Home Economics and who will receive a special diploma when graduated. The majority of them expect to remain at home after finishing school, though a few may go to some special school for further training.

*General Problem* for entire course.

How can a high school girl learn from the study of Home Economics how to keep herself and her family well and happy, to carry intelligently her share of responsibility in promoting the welfare of the community and to live rightly within the limits of her income?

Note: For details of this course write to Kensington High School, Phila., Pa.

## Household Arts Course[2]

### Tentative outline of course of study

This course is planned to fit the needs of two groups of girls.

I. Those in the Commercial Department who expect to take up some form of business work at the completion of their high school course.

II. Those expecting to teach regular grade work in the elementary school after two years additional study at normal school.

The time allowed is as follows:

II Year. 1st and 2d terms. 2 40-min. periods per week.

III Year. 1st and 2d terms. 2 40-min. periods per week.

[1] This outline was prepared by Miss Constance Pendleton assisted by Miss Winifred Ingerson.

[2] In these outlines the term Home Economics is used as the inclusive term and Household Arts to indicate the home economics studies when offered for general education.

None of this work is required for graduation.

The second-year work is planned as a general *Survey Course* covering briefly the various fields of home economics study. The third-year work will be devoted to more specific work in the technique of sewing and cooking.

### *Household Arts I*

II Year. 1st term. 18 weeks. 2 40-min. periods per week.

*Unit I. Health:* 3 weeks.

Problems and Topics for Discussion

1. How will the study of Household Arts help us to learn to live rightly?
   Subjects included in Household Arts and their relation to life.
2. How does health contribute to happiness? to efficiency?
3. How does the health of the individual affect the family? the school? the community?
4. What factors contribute to health?

| | |
|---|---|
| Food | Air |
| Clothing | Rest |
| Cleanliness | Recreation |

5. What must a city girl do to keep her skin, hair, teeth, and nails in good condition?
   Bathing.
   Care of hair, nails, and teeth.
6. What ought a high school girl do in order to assist in keeping her home clean?
   Care of the bedroom.
   Care of the bathroom.
   Care of the other rooms.
7. The city has given us a beautiful new school. How are we going to take care of it?
8. How can we all do our part toward keeping the streets and other public places clean?
9. How does clothing affect health?
   Shoes, corsets, underclothes, hats, dresses, coats.
   Cleanliness.
   Proper clothing for cold weather — value and uses of wool.
   Necessity for changing of wet clothing, etc.

*Unit II. Textiles:* 4 weeks.

1. What do we need to know about materials in order to buy wisely?
   Properties of four principal fibers.
   Adulterations and substitutes.
   Tests.
   Primitive and modern industries.
   Design in cloth.
   Dyes.
   Common materials — prices, widths, quality, etc.

*Unit III. Division of Income:* 6 weeks.

1. All materials cost a great deal more than formerly. How can we learn from the study of Household Arts how to keep down expenses?
   *a.* Family budget for family on moderate income.
   *b.* Personal budget for high school graduate earning $8 per week.
   *c.* Make present supply last longer.
      Daily care of the clothing.
      Mending.
      Making over.
   *d.* Buy wisely.
      Relative cost and value of bought and home-made garments.

*Unit IV. Costume Design:* 5 weeks.

1. How should a girl dress for school or business?
   Suitability of clothing to occasion.
   Dress as an indication of character.
   Good line.
   Harmony of color.
   Style.
   Individuality.

## *Household Arts II*

II Year. 2d term. 18 weeks. 2 40-min. periods per week.

### Problems and Topics for Discussion

*Unit I. Emergency or Economy Problems:*

1. The government has asked us to economize in the use of foods. How can we do this without reducing the needed amount of nourishment?
2. What other forms of food economy will be a help to the country and also keep down expenses?

Avoid all kinds of waste.
Use the left-overs.
Use perishable rather than nonperishable foods.
Canning and preserving.

*Unit II. Dietetics:*

1. How will the study of food help us to keep in good health?
   Why do we eat?
   Growth and repair.
   Energy.
   Regulation of bodily functions.
2. What foods contribute especially to these different needs?
   Discussion of foodstuffs, explanations of terms, etc.
3. Eating between meals.
4. How can we measure the value of the food we eat?
5. If I bring my lunch to school what shall I bring in order to get the proper balance of foodstuffs?
6. If I buy my lunch at school what shall I select so as to get the proper amount of nourishment for what I want to spend?

*Unit III. House Management:*

1. If the mother were to be away from home for a week, should a high school girl be able to manage the household and cook the meals?
2. In such case what points would she have to consider in order to keep the family well and happy?
3. What proportion of income should be spent on food?
   Review division of income with special emphasis on expenditure for food.
4. How should the marketing be done?
   Where to buy.
   What to buy.
   How much to buy.
5. What care should be taken of the food when brought to the house?

| | | |
|---|---|---|
| Milk | Meat | Dry groceries |
| Butter | Vegetables | Canned goods |
| Eggs | Fruit | |

6. What special foods should be provided for the baby, the growing child, the father or brother?
7. What care does the baby need?
8. In preparing meals what is it necessary to know about the cooking of:
   Meats? Vegetables? Eggs?

9. What points should we keep in mind in the serving of meals?
10. In preparing a meal how can the work be arranged so as to have everything ready at once and on time?
11. What care should be taken of the kitchen? the refrigerator? the dining room?
12. How can all the work of the household be done and still leave time for necessary rest and recreation?

Proper organization and planning.
Labor-saving devices.

*Household Arts III*

III Year. 1st term. 18 weeks. 2 40-min. periods per week.

*Unit I. The Making of a Separate Skirt.* 7 weeks.
*Unit II. The Making of a Shirtwaist.* 7 weeks.
*Unit III. Clothing for the Baby.* 4 weeks.

In the fall term to be worked out at Christmas time in connection with baskets sent to poor families, or dolls sent to day nurseries. In the first case each girl would make one garment to contribute to the set. In the second case each girl would make a complete outfit for a baby doll.

In the spring term this unit could be brought in at the time of "Baby Week" and some form of charitable work undertaken.

*Household Arts IV*

III Year. 2d term. 18 weeks. 2 40-min. periods per week.

This course will be a continuation of Household Arts, 2d year, 2d term, with more emphasis on the technique of cookery.

Consideration should be given throughout the course to the meal as a whole, even when only one article is cooked, and to the cost and food value in each case.

## FOR GIRLS 14–16 YEARS OF AGE REQUIRED BY LAW TO ATTEND EIGHT HOURS PER WEEK

### Household Arts Course for Continuation Classes One Hour per Week. Thirty-six Weeks

*Unit I. Economy.* 9 weeks.

What can a girl earning her own living learn from the study of Household Arts to help her keep down expenses?

1. Care of the clothing — dresses, underclothes, shoes, hats, coats, etc.
   Removal of spots.
   Methods of laundering.
   Darning and patching.
   Making over dresses.

Practical work. Make over dress in class.

2. Ready-made and home-made garments.
   Comparative cost and value.

Practical work. Make some simple garment or accessory in class.
Calculate cost and compare with similar bought article.

3. Selection of clothing.
   How should a girl dress for street? for work?
   How can we tell if a ready-made dress will wear well?
   Is there anything we can do to make it wear longer?
4. Division of income and personal budget.
   Value of budget system.
   Make budgets for working girl.

*Unit II. Textiles.* 4 weeks.

1. How will the study of textiles be a help to every girl?
2. Why is it of special interest to a Kensington girl?
   Development of modern textile industry.
   Production of textile fibers.
   Test.
   Adulterations and substitutes.
   Common materials.
   Care of various fabrics.
   Disposal of wornout garments and household materials.
   Shoddy and paper industries.

*Unit III. Health.* 5 weeks.

1. What can a girl learn from the study of Household Arts to help to keep herself in good health?
2. Why is health important?
   *a.* Personal hygiene.
   *b.* Hygiene of clothing.
   *c.* Food — Why we eat. What should we eat? Lunch brought from home or bought at restaurant. What to get. Comparison of cost and food value.
   *d.* Air, rest, recreation.
   *e.* Sanitation.

*Unit IV. The Making of a Shirtwaist (or Separate Skirt).* 12 weeks.

Use of commercial pattern.
Ways of altering commercial pattern.
Suitability of material and design.
Cost as compared with bought waist.
Good workmanship.

*Unit V. Vocational Guidance.*

1. How many ways are there in Philadelphia for a girl to earn her own living?
   *a.* Without specific training.
   *b.* With training.
   Means of getting necessary training.

Whenever possible outside speakers will be obtained for the lessons in this unit. These talks may be given from time to time throughout the course, or consecutively.

## WADLEIGH HIGH SCHOOL, NEW YORK CITY

### Homecraft Course of Study of Four Years

### I

### First Year

#### REQUIRED

| | *Periods* |
|---|---|
| English | 5 |
| Elementary Biology | 5 |
| Domestic Science I; Domestic Art I | 4 |
| Elementary Drawing | 2 |
| From Groups I and II | 6 |
| Physical Training I | 2 |
| Music I | 1 |
| Total | 25 |

#### ELECTIVES

*Group I*

Household Arithmetic, Vocation Study, Study of Vocational Fitness, Current History I, Epochs of English History, Clothing — Its Care and Remodeling.

*Group II*

German or French I, II, III, or IV. (The subjects as indicated by the Roman numerals may be carried throughout the course. They will be studied five hours a week except during the fourth year.)

II

SECOND YEAR

REQUIRED

| | *Periods* |
|---|---|
| English | 5 |
| Domestic Science II; Domestic Art II | 4 |
| Drawing | 2 |
| Hygiene and Sanitation | 5 |
| From Groups I, II, III, and IV | 3 |
| Physical Training II | 2 |
| Music II | 1 |
| Modern History I | 3 |
| Total | 25 |

*Group III*

Millinery, Household Chemistry.

*Group IV*

Epochs of European History, Epochs of American History, Epochs of Ancient History, History of Woman's Work, History of Arts and Crafts, Current History II.

III

THIRD YEAR

REQUIRED

| | *Periods* |
|---|---|
| English | 5 |
| Household Management | 4 |
| From Groups I to IV, inclusive | 11 |
| Physical Training III | 2 |
| Modern History II | 3 |
| Total | 25 |

*Group V*

Domestic Science III, Domestic Art III, Applied Design, Current History III, Mathematics, Applied Physics, Music III.

IV

FOURTH YEAR

REQUIRED

| | *Periods* |
|---|---|
| English | 5 |
| Social Efficiency | 3 |
| Essentials of Conduct | 1 |
| From Groups I to VI, inclusive | 9 |
| Physical Training IV | 2 |
| American History | 5 |
| Total | 25 |

*Group VI*

Domestic Science IV, Domestic Art IV, Economics, Household Design and Decoration, Current History IV, Fundamentals of Legal Procedure, Physiology, Bacteriology, and Sanitation, Music IV.

V

1. Any student satisfactorily completing work amounting to 17 units shall receive a diploma or a graduating certificate. In the case of subjects requiring preparation, each week hour counts one point. In subjects not requiring preparation, each week hour counts as one half point. *Subjects in the General Course of the school may be elected* and the points credited as provided in that course.

2. The mathematics listed in this course is required unless an equivalent amount in mathematics is taken in the General Four Years' Course.

3. No student is to be continued in this course who fails to make forty points in two years or eighty points in three years, unless the failure is due to absence on account of illness or for some other equally good reason.

4. When the interests of a pupil demand it, the principal may modify the program of such pupil or permit her to follow a special program.

## HIGH SCHOOL OF PRACTICAL ARTS, BOSTON, MASS.

### COURSE OF STUDY

#### First Year

| Required | Periods per week | Elective | Periods per week |
|---|---|---|---|
| English | 4 | After the first year each pupil is required to elect one of three industrial courses | |
| History | 4 | | |
| Review of arithmetic with application to industrial work | 2 | | |
| Elementary Science | 2 | | |
| Art | 4 | | |
| Sewing | 6 | | |
| Cooking and housewifery | 4 | | |
| Choral Practice | 1 | | |
| Physical Training | 2 | | |
| | 29 | | |

#### Second Year

| | | | |
|---|---|---|---|
| English | 4 | Dressmaking | 10 |
| Mathematics I | 4 | Millinery | 10 |
| Chemistry | 4 | Household Science | 10 |
| Art | 4 | | |
| Choral Practice | 1 | After the second year pupils may elect Salesmanship, Special Art or Telegraphy | |
| Physical Training | 2 | | |
| | 19 | | |

#### Third Year

| | | | |
|---|---|---|---|
| English | 4 | Dressmaking | 10 |
| History; Civil Government | 4 | Millinery | 10 |
| Physics | 4 | Household Science | 10 |
| Art | 4 | Salesmanship | 10 |
| Choral Practice | 1 | Special Art | 10 |
| Physical Training | 2 | Telegraphy | 10 |
| | 19 | | |

### Fourth Year

| Required | Periods per week | Elective | Periods per week |
|---|---|---|---|
| English | 4 | Dressmaking | 10 |
| Social Science | 5 | Millinery | 10 |
| Physiology, Hygiene and Home Nursing | 4 | Household Science | 10 |
| Art | 4 | Salesmanship | 10 |
| Choral Practice | 1 | Special Art | 10 |
| Physical Training | 2 | Telegraphy | 10 |
| | 20 | | |

### Outline of Work in Sewing and Dressmaking

### First Year

#### Plain Sewing

I. *Review of Stitches:* Running, overseaming, back-stitching, hemming, putting on band, gathering, button-hole.

II. *Use and Care of Sewing Machine.*

III. *White Work:* The garments made include hand and machine sewing, all but the apron to be cut from standard patterns.

1. Apron with ruffle, hem tucks, straight bands, straight facings.
2. Drawers with stitching curved seams, French fell, cutting and placing yokes, bias facings, straight bands, plackets, joining lace and embroidery, ruffle placed with tuck.
3. White skirt, with French seams, tucked ruffle put on with feather stitched band, dust ruffle placed under tuck.
4. Princess night dress embroidered.
5. Corset cover or chemise.
6. Fancy neckwear for embroidery, rolling hems, and whipping lace.
7. Dress for small child.
8. Mending, patching, darning stockings and cotton clothes, hem-stitching and napping hem (5 lessons).

IV. *Study of Textiles:* Cotton and its uses, different weaves, widths, prices.

## Second Year

At the beginning of this year, the pupils choose as a special subject, Dressmaking, Millinery, or Domestic Science. Dressmaking is taught as a vocation. Pupils who elect Domestic Science or Millinery take sewing as a domestic art for home needs only.

### Dressmaking Course

I. Draft shirt waist and seven-gored skirt patterns.
II. Cut, fit, make:
  1. Tailored waist with sleeve faced in.
  2. Cotton dress with plaids or stripes trimmed with pipings, sleeve bound in.
  3. Lingerie waist with laces and embroideries.
  4. Mending, patching, and darning cotton and linen clothes and table linen (5 lessons).
III. *Study of Textiles:* Cotton, linen, and laces.

### Domestic Arts Course

I. Cut from standard patterns and make:
  1. (*a*) Dress, cotton or linen.
    (*b*) Waist, cotton or linen.
  2. Mending, patching, and darning cotton and linen clothes and table linen (5 lessons).

## Third Year

### Dressmaking Course

I. *Study of Styles.*
  1. From fashion plates.
  2. From visits to shop openings with descriptions.
II. *Pattern Making.*
  1. Remodel skirt draft conforming to prevailing styles.
  2. Study the division of breadths and flares. Using the seven-gored skirt draft as a basis, cut skirts having two, three, four, five, and six gores; also circular skirt, plaited skirt.
  3. Modify shirt waist draft for tight-fitting lining.

4. Cut, fit, and make:
   *a.* Woolen tailored skirt.
   *b.* Silk waist.
   *c.* Woolen dress.
   *d.* Silk dress.
   Pupils are encouraged to make over dresses.
5. Mend woolens, silks, and laces (5 lessons).

III. *Study of Textiles:* Wool, silk.

DOMESTIC ARTS COURSE

I. Silk or wool dress made from standard pattern, or silk waist and woolen skirt.
II. Mend woolens, silks, and laces (5 lessons).

## Fourth Year

DRESSMAKING COURSE

I. *Study of Styles.*
   1. From fashion plates.
   2. From visits to the shop openings with descriptions.
II. *Draft patterns* and modify them for all styles.
III. Garments for adults made by shop methods to include practice in making draped waists, boned with and without cases, and in finishing bottom of skirts with braid. The problem of a coat may be taken.
IV. *Graduation dress.*
V. *Review Study of Textiles.*

DOMESTIC ARTS COURSE

I. Dress, or waist and skirt, of either silk or wool.
II. Graduation dress.

SALESMANSHIP COURSE

1. *Millinery Group.*

The salesmanship course complements the millinery training, and is compulsory for members of this group. It enables them to fill stock or selling positions in the store when the dull season arrives in the work room.

The course comprises six periods a week, distributed over a period of three years, thus making two periods weekly during the second, third, and fourth years.

The second year girls take up the study of cotton, as this is the first material upon which they work. They follow this with silk, then with the less important animal and vegetable fibers. The aim is to acquaint them thoroughly with the finished material through a careful study of the fiber and its manufacturing processes; and to further acquaint them with prices through a study of the sources of supply, of problems of transportation, marketing, and labor.

The third year girls continue their study of materials, taking up the flax and wool fibers. Store requirements are introduced this year. Business dress and business regulations are discussed. The Retail Trade is studied, with reference to the specialty shop and the department store. The organization and system of a department store are taken up in detail, and training given the girls to prepare them for such junior positions as those of stock girls, examiners, and cashiers.

The fourth year girls study the selling position and the principles underlying a sale. Discussions are based upon their store practice and upon their own experiences as customers. A mass of material is contributed. This is analyzed so that they may learn to distinguish between good and bad methods employed in selling. Demonstration sales are held. Subjects, such as the Minimum Wage, the Real Wage, the Consumers' League, which bear upon the relation between employers and the public are introduced. The aim is to arouse an attitude of mind that will realize the manysidedness of a labor problem and so make for intelligent coöperation in arriving at its solution.

2. *Store Group.*

These girls are making this their major subject. They give four periods to it in the third year and six periods in the fourth year. Class work is combined with laboratory work which includes visits to stores, museums, factories, and talks upon some particular phase of the work given by business people.

All salesmanship girls are required to have store practice, this in part time work in which the pupil spends her day in the store instead of at school. She is counted as present at school. The work is observed and credit given for it.

## Outline of Work in Millinery

### First Year

I. *Bandeaux of Buckram and Wire.*
II. *Folds.*
   1. Cutting.
   2. Pic ing — nap.
   3. Making.
III. *Frames of Buckram.*
   1. Taking measurements.
   2. Making frame.
   3. Covering frame with canton flannel.
   4. Plain lining put in with buttonhole stitch.
IV. *Frames of Wire.*
V. *Study of Spring Styles:* from fashion plates and by visits to shops; classroom discussions; written descriptions illustrated by sketches.
VI. *Spring Hat* of original design or adaptations from fashion plates.
VII. *Ornaments of Different Materials.*
VIII. *Renovating Materials.*
IX. *Study of all Textiles used* in various processes.

### Second Year

I. *Study of Fall Styles:* from fashion plates and by visits to shops; classroom discussions; written descriptions illustrated by sketches.
II. *Remodel Fall Hats of Various Materials.*
III. *Making Frame Hats.*
IV. *Bonnets and Toques,* suitable for all occasions.
V. *Study of Spring Styles:* from fashion plates and by visits to shops; classroom discussions; written descriptions illustrated by sketches.
VI. *Renovating Materials.*
VII. *Making Bows and Ornaments.*
VIII. *Additional Practice in Making Folds and Frames.*
IX. *Study of all Textiles used.*

THIRD YEAR

I. *Study of Fall Styles:* from fashion plates and by visits to shops; classroom discussions; written descriptions illustrated by sketches.
II. *General Review of Work of Previous Years.*
III. *Fur Hats:* covered and trimmed.
IV. *Study of Spring Styles:* from fashion plates and by visits to shops; classroom discussions; written descriptions illustrated by sketches.
V. *Estimating Value of Finished Products,* including price of materials, cost of labor, and shop expenses.
VI. *Study of Materials used.*

OUTLINE OF ONE-YEAR COURSE IN HOME MILLINERY, TAKEN BY PUPILS WHO ELECT THE DRESSMAKING OR THE DOMESTIC SCIENCE COURSES. THIS COURSE IS GIVEN DURING THE THIRD YEAR

I. *Study of Styles:* same as in other courses.
II. *Adaptations of Shapes to Individuals.*
III. *Renovating Materials.*
IV. *Remodeling Hats.*
V. *Making Winter Hats* using manufactured frames.
VI. *Practice in Making All Kinds of Folds.*
VII. *Automobile and Party Bonnets.*
VIII. *Practice in Making Bows, Flowers, Ornaments.*
IX. *Fur Work.*
X. *Spring Hats:* straw sewing; trimming.

COURSE IN COOKING AND HOUSEWIFERY

FIRST YEAR

*Cooking.* 38 lessons.

*Practice.* Methods of cooking applied to simple beverages; cereals; vegetables; legumes; milk; cheese; eggs; meat; fish; baking-powder mixtures and bread; serving of breakfast.

*Theory.* Foodstuffs used considered under the following headings: source; nutritive values; choice; cost; storage; methods of preparation.

*Housewifery.* 38 lessons.

*Practice.* (*a*) Building a fire; care of gas and coal ranges; sweeping and dusting; treatment of wooden floors and standing finish; cleaning paint; washing windows; cleaning of metals; including silver; care of sink, refrigerator, and garbage cans; choice of and care of cooking utensils; methods of dish washing; daily care of bedrooms and bathrooms; table-setting and serving.

(*b*) Laundry work, including mending and sorting of clothes; removing of stains; soaking of clothes; washing of white and colored cotton and linen fabrics and flannels; starching; plain ironing.

*Theory.* Full notes and explanations of above processes, with chemical actions involved.

## Second Year

### Domestic Science, Major

*Practice.* 66 lessons.

Advanced cooking, including the comparative effects of different methods on the same or similar foodstuffs, preparation of fruits, vegetables, soups, eggs, cheese, fish, meat, simple desserts, and meat substitutes; use of leavening agents; cooking and serving of menus suitable for simple luncheon or dinner, with special reference to proper combinations of food.

*Theory* 10 lessons.

Foodstuffs studies under same headings as in first year, considering also (1) chemical composition; (2) food botany; (3) source and nature of food adjuncts; (4) buying and care of staples.

*Housewifery.* Review of first year course; individual practice in cleaning processes, dish-washing, care of refrigerator, and simple laundry work.

*Food Botany.* 38 lessons.

## Third Year

*Cooking.* 114 lessons.

*Practice.* Canning and preserving; bread-making; cooking of poultry and shell fish; steamed puddings; salads; cake; cookies; pastry; frying; including making of fishballs, fritters, doughnuts, and croquettes; frozen desserts; food for invalids; preparing and serving menus suitable for dinners and formal luncheons.

*Theory.* Notes on above subjects, including results and prevention of bacterial action in food materials; physical action applied to frozen

mixtures, and the raising of batters; proper combinations of food material from a hygienic and nutritive standpoint; dietaries for invalids; adulterations of foods. Classes visit factories preparing foodstuffs for the market.

*Housewifery.* Practice in serving of meals and care of dining room.

### Fourth Year

#### Domestic Science

*Cooking.* 114 lessons.

*Practice.* Includes individual work in bread-making; experiments with untried recipes; review of principles taught in preceding years; handling of food in institutional amounts; use of labor-saving devices, including the fireless cooker. Continued practice on some few recipes, to attain perfect results; use of the chafing dish; fancy cooking and the serving of course luncheons and dinners; catering for large numbers.

*Theory.* Notes on the principles of dietetics; calculation of the caloric value of foods and food combinations; planning of dietaries based on 100-calorie portions; estimates of the actual and comparative costs of common foodstuffs.

*Housewifery.* Practice as in Second and Third Years.

## GIRLS' VOCATIONAL HIGH SCHOOL, MINNEAPOLIS, MINN.

Requirements for Admission: Age, 14 years or over, and Eighth Grade graduation.

(A girl of 14 or over will be admitted to dressmaking, millinery, power machine, or home-makers courses upon recommendation of principal if through the sixth grade.)

One-year courses in telegraphy and salesmanship will be arranged for girls who have had two years of high school.

One-year course in stenography will be arranged for high school graduates.

Academic credits from other high schools will be accepted.

Three months of actual trade experience approved by the school is required for graduation. Graduation will therefore be one term after completion of course.

A fifth term in school approved by principal may be substituted for trade experience.

Two dollars a term will be charged for the use of books and materials. One dollar will be refunded if books and implements are returned in good condition.

STENOGRAPHY

| *1st Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Typewriting | 2 | 5 |
| Bookkeeping | 2 | 4 |
| Salesmanship | 1 | 4 |
| Cooking | 2 | 1 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *2d Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Typewriting | 1 | 5 |
| Stenography | 1 | 5 |
| Salesmanship | 1 | 5 |
| Bookkeeping | 2 | 4 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *3d Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Typewriting | 2 | 5 |
| Stenography | 1 | 5 |
| Bookkeeping | 2 | 2 |
| Civics | 1 | 3 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *4th Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Typewriting | 2 | 5 |
| Stenography | 1 | 5 |
| Commercial Law | 1 | 5 |
| Office Training | 1 | 5 |
| Drawing | 2 | 2 |
| Music | 1 | 2 |

OFFICE ASSISTANT

| *1st Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Typewriting | 2 | 5 |
| Bookkeeping | 2 | 4 |
| Salesmanship | 1 | 4 |
| Cooking | 2 | 1 |
| Gymnasium and Music | 2 | 2 |

| *2d Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Typewriting | 2 | 5 |
| Bookkeeping | 2 | 4 |
| Salesmanship | 1 | 4 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *3d Term* | *Pr.* | *Da.* |
|---|---|---|
| English | 2 | 5 |
| Bookkeeping or Multigraphing | 2 | 5 |
| Typewriting | 2 | 5 |
| Civics | 1 | 3 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *4th Term* | *Pr.* | *Da.* |
|---|---|---|
| Bookkeeping or Multigraphing | 4 | 5 |
| Typewriting | 2 | 5 |
| Commercial Law | 1 | 5 |
| Office Training | 1 | 5 |
| Drawing | 2 | 2 |
| Music | 1 | 2 |

### Salesmanship

| *1st Term* | *Pr.* | *Da.* | *3d Term* | *Pr.* | *Da.* |
|---|---|---|---|---|---|
| Salesmanship | 1 | 5 | Salesmanship | 1 | 5 |
| Textiles | 1 | 5 | Merchandise | 1 | 5 |
| Commercial Geography | 1 | 5 | Psychology | 1 | 5 |
| English | 1 | 5 | Commercial History | 1 | 5 |
| Arithmetic | 1 | 5 | English | 1 | 5 |
| Design | 1 | 5 | Design | 1 | 5 |
| Gymnasium and Music | 2 | 2 | Gymnasium and Music | 2 | 2 |

### Practice Work in Stores

| *2d Term* | *Pr.* | *Da.* | *4th Term* | *Pr.* | *Da.* |
|---|---|---|---|---|---|
| Salesmanship | 1 | 5 | Salesmanship | 1 | 5 |
| Textiles | 1 | 5 | Merchandise | 1 | 5 |
| Commercial Geography | 1 | 5 | Economics | 1 | 5 |
| English | 1 | 5 | Commercial History | 1 | 5 |
| Arithmetic | 1 | 5 | English | 1 | 5 |
| Design | 1 | 5 | Design | 1 | 5 |
| Gymnasium and Music | 2 | 2 | Music | 1 | 2 |

### Telegraphy

| *1st Term* | *Pr.* | *Da.* | *3d Term* | *Pr.* | *Da.* |
|---|---|---|---|---|---|
| Telegraphy | 2 | 5 | Telegraphy | 2 | 5 |
| Commercial Geography | 1 | 5 | History | 1 | 5 |
| English | 1 | 5 | English | 1 | 5 |
| Typewriting | 1 | 5 | Typewriting | 2 | 5 |
| Arithmetic | 1 | 5 | Music | 1 | 2 |
| Music | 1 | 2 | Gymnasium | 1 | 2 |
| Gymnasium | 1 | 2 | | | |

| *2d Term* | *Pr.* | *Da.* | *4th Term* | *Pr.* | *Da.* |
|---|---|---|---|---|---|
| Telegraphy | 2 | 5 | Telegraphy | 3 | 5 |
| Commercial Geography | 1 | 5 | Routine | 1 | 5 |
| English | 1 | 5 | History | 1 | 5 |
| Arithmetic | 1 | 5 | English | 1 | 5 |
| Typewriting | 1 | 5 | Typewriting | 1 | 5 |
| Music | 1 | 2 | Music | 1 | 2 |
| Gymnasium | 1 | 2 | | | |

## Junior Nursing

| *1st Term* | *Pr.* | *Da.* |
|---|---|---|
| Cooking | 3 | 5 |
| Serving | 1 | 5 |
| Sewing | 2 | 4 |
| Design | 2 | 1 |
| Mathematics | 1 | 5 |
| Civics | 1 | 5 |
| Gymnasium | 1 | 2 |

| *2d Term* | *Pr.* | *Da.* |
|---|---|---|
| Physiology | 1 | 4 |
| Child Study | 1 | 4 |
| Mathematics | 1 | 4 |
| Chemistry | 2 | 5 |
| English | 1 | 5 |
| Design and Music | 2 | 2 |
| Games | 1 | 1 |

| *3d Term* | *Pr.* | *Da.* |
|---|---|---|
| Bacteriology | 1 | 3 |
| Child Study | 1 | 3 |
| Laundry and Cooking | 2 | 3 |
| Practice | 2 | 5 |
| Chemistry | 2 | 5 |
| English | 1 | 3 |
| Music | 1 | 2 |
| Games | 1 | 1 |

| *4th Term* | *Pr.* | *Da.* |
|---|---|---|
| Nursing | 2 | 5 |
| Physics | 2 | 5 |
| English | 1 | 5 |
| History | 1 | 5 |
| Dietetics | 1 | 5 |
| Music | 1 | 2 |

## Home-makers

| *1st Term* | *Pr.* | *Da.* |
|---|---|---|
| Cooking | 3 | 5 |
| Serving | 1 | 5 |
| Sewing | 2 | 4 |
| Design | 2 | 1 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Music | 1 | 2 |

| *2d Term* | *Pr.* | *Da.* |
|---|---|---|
| Cooking and Laundry | 4 | 5 |
| English | 1 | 5 |
| Home Nursing | 1 | 5 |
| Mathematics | 1 | 5 |
| Design | 2 | 1 |
| Music and Gymnasium | 2 | 2 |

| *3d Term* | *Pr.* | *Da.* |
|---|---|---|
| Cooking or Sewing | 4 | 5 |
| English | 1 | 5 |
| Chemistry | 2 | 5 |
| or | | |
| General Science | 1 | 5 |
| and | | |
| Mathematics | 1 | 5 |
| Gymnasium and Music | 2 | 2 |

| *4th Term* | *Pr.* | *Da.* |
|---|---|---|
| Cooking or Sewing | 4 | 5 |
| English | 1 | 5 |
| Chemistry | 2 | 5 |
| or | | |
| General Science | 1 | 5 |
| and | | |
| Mathematics | 1 | 5 |
| Music | 1 | 2 |

## Dressmaking

| *1st Term* | *Pr.* | *Da.* |
|---|---|---|
| Sewing | 4 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| Cooking | 1 | 2 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Gymnasium and Music | 2 | 2 |

| *2d Term* | *Pr.* | *Da.* |
|---|---|---|
| Sewing | 4 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *3d Term* | *Pr.* | *Da.* |
|---|---|---|
| Sewing | 7 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| History | 1 | 5 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *4th Term* | *Pr.* | *Da.* |
|---|---|---|
| Sewing | 7 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| History | 1 | 5 |
| Music | 1 | 2 |

## Millinery

| *1st Term* | *Pr.* | *Da.* |
|---|---|---|
| Millinery | 4 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| Cooking | 2 | 1 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Gymnasium and Music | 2 | 2 |

| *2d Term* | *Pr.* | *Da.* |
|---|---|---|
| Millinery | 4 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *3d Term* | *Pr.* | *Da.* |
|---|---|---|
| Millinery | 4 | 5 |
| Textiles | 1 | 1 |
| Design | 2 | 2 |
| English | 2 | 1 |
| English | 1 | 5 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| *4th Term* | *Pr.* | *Da.* |
|---|---|---|
| Millinery | 7 | 5 |
| Design | 2 | 3 |
| Salesmanship | 1 | 5 |
| Music | 1 | 2 |

## Catering

| 1st Term | Pr. | Da. |
|---|---|---|
| Cooking | 3 | 5 |
| Serving | 1 | 5 |
| Sewing | 2 | 4 |
| Design | 2 | 1 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Music | 1 | 2 |

| 2d Term | Pr. | Da. |
|---|---|---|
| Cooking and Laundry | 4 | 5 |
| English | 1 | 5 |
| Home Nursing | 1 | 5 |
| Mathematics | 1 | 5 |
| Design | 2 | 1 |
| Music and Gymnasium | 2 | 2 |

| 3d Term | Pr. | Da. |
|---|---|---|
| Cooking | 4 | 5 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Gen'l Science or Chemistry | 1 | 5 |
| Music and Gymnasium | 2 | 2 |

| 4th Term | Pr. | Da. |
|---|---|---|
| Cooking | 7 | 5 |
| Mathematics | 1 | 5 |
| General Science or Chemistry | 1 | 5 |
| Music | 1 | 2 |

## Power Machine

| 1st Term | Pr. | Da. |
|---|---|---|
| Sewing | 4 | 5 |
| Design | 2 | 2 |
| Textiles | 1 | 1 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Music and Gymnasium | 2 | 2 |

| 2d Term | Pr. | Da. |
|---|---|---|
| Power Machine | 4 | 5 |
| Cooking | 2 | 2 |
| English | 1 | 5 |
| Mathematics | 1 | 5 |
| Gymnasium | 1 | 2 |
| Music | 1 | 2 |

| 3d Term | Pr. | Da. |
|---|---|---|
| Power Machine | 4 | 5 |
| General Science | 1 | 5 |
| Mathematics | 1 | 5 |
| English | 1 | 5 |
| Music | 1 | 2 |

| 4th Term | Pr. | Da. |
|---|---|---|
| Power Machine | 4 | 5 |
| General Science | 1 | 5 |
| Mathematics | 1 | 5 |
| English | 1 | 5 |
| Music and Gymnasium | 2 | 2 |

## DEPARTMENT OF VOCATIONAL EDUCATION, ARIZONA

### State and Federal Aid for Vocational Education under the Smith-Hughes Act

### Home Economics

*Kinds of Classes.*

For the year 1918–1919 Smith-Hughes funds for Home Economics will be available for day schools and classes only. The Board will approve evening and part-time classes in Home Economics without subsidy.

*Minimum Plant and Equipment.*

All schools and classes participating in Smith-Hughes funds will be subject to inspection by a representative of the State Board and approval will be continued only as long as the plant, equipment, and instruction are such as to conform to the purposes of the Smith-Hughes Act and the regulations of the State and Federal Boards. No school will receive aid for Home Economics which does not have:

1. A well-appointed room for demonstration in cooking.
2. A sewing room with sewing machines.
3. Home nursing as part of the course in Home Economics.
4. Some provision for laundry work.

*Minimum for Maintenance.*

It will be incumbent upon local school authorities to keep the equipment efficient for the practical work to be done. They will be expected to provide sufficiently for the upkeep on all buildings and classrooms used, the materials required in the work, the salaries of non-vocational teachers, and part of the salaries of vocational teachers not covered by Smith-Hughes funds.

The local Board will be expected to employ at least one fully qualified teacher for Home Economics and the State Board urges that such teacher be employed for twelve months in the year in order that she may supervise the project work during the summer months that school is not in session. One month's vacation should be arranged for.

*Character and Content of Course of Study.*

The subject matter in Home Economics must be as broad as the need of the home-maker demands. In addition to sewing, there should be included garment-making, millinery, designing, dressmaking, textiles, care of clothing, etc. In addition to clothing and food study, houseplanning, furnishing, and management, home nursing, household accounts, and laundry work should be given attention.

## Suggested Weekly Program of Vocational Home Economics

45-Minute Periods

FIRST YEAR

| Per. | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| 1. | English | English | English | English | English |
| 2.<br>3. | Clothing | Food Study | Clothing | Food Study | Clothing |
| 4.<br>5. | Drawing & Design | General Science | Drawing & Design | General Science | Drawing & Design |
| 6.<br>7.<br>8. | Electives | Electives | Electives | Electives | Electives |

SECOND YEAR

| Per. | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| 1. | Home Management | Home Management | Home Management | Home Management | Home Management |
| 2. | | Household Chemistry | | Household Chemistry | |
| 3. | Dress Making | | Dress Making | | Dress Making |
| 4. | | Home Project | | Home Project | |
| 5. | English | English | English | English | English |
| 6. | Civics & Citizenship | Civics & Citizenship | Civics & Citizenship | Civics & Citizenship | Civics & Citizenship |
| 7.<br>8. | Electives | Electives | Electives | Electives | Electives |

Note. Home Management includes housekeeping, planning and serving of meals, laundry, household accounts, home nursing, etc.

## Suggested Four Year Course in Vocational Home Economics

| FIRST YEAR | FIRST SEMESTER | SECOND SEMESTER |
|---|---|---|
| English | 5 periods | 5 periods |
| Elective | 5 periods | 5 periods |
| **Drawing and Design | 3 (90 min.) periods | 2 (90 min.) periods |
| *Garment Making | 3 (90 min.) periods | 2 (90 min.) periods |
| **General Science | 2 (90 min.) periods | 3 (90 min.) periods |
| *Food Study and Cooking | 2 (90 min.) periods | 3 (90 min.) periods |
| **SECOND YEAR** | | |
| English | 5 periods | 5 periods |
| Elective (Civic and Citizenship) | 5 periods | 5 periods |
| **General Science | 3 (90 min.) periods | 2 (90 min.) periods |
| **Housekeeping, Household Accounts, Planning and Serving Meals | 3 (90 min.) periods | 2 (90 min.) periods |
| **Physiology, Hygiene and Home Nursing | 2 (90 min.) periods | 3 (90 min.) periods |
| *Elementary Dressmaking | 2 (90 min.) periods | 3 (90 min.) periods |
| **THIRD YEAR** | | |
| English | 5 periods | 5 periods |
| Elective | 5 periods | 5 periods |
| **Household Chemistry | 7–8 (90 min.) periods | 7–8 (45 min.) periods |
| *Clothing Design, House Planning and Furnishing | 3 (90 min.) periods | 2 (90 min.) periods |
| *Textiles, Millinery and Dressmaking | 2 (90 min.) periods | 3 (90 min.) periods |

* This division of time — one half of a six-hour day devoted to instruction in Home Economics — is required in Smith-Hughes schools in cities of over 25,000 population. See page 46, Bulletin No. 1, Statement of Policies, Federal Board of Vocational Education.

** In cities of less than 25,000 population the law allows a modification of the length of course and of the hours of instruction per week. See page 47, Bulletin 1. The half day, devoted to vocational work, may include instruction both in Home Economics subjects, such as those marked *, and in related subjects as those marked **. A number of conditions will modify the selection of these courses. If food study has been taught in the eighth grade, garment making may be given two periods a day throughout the first year of the high school. If there has been little or no instruction in physiology and hygiene in the grammar grades this subject may be taught in the first year of high school. There may be reasons for teaching general science and drawing and design and any other vocational subject five double periods per week for a shorter time rather than two and three periods per week for a longer time.

| FOURTH YEAR | FIRST SEMESTER | SECOND SEMESTER |
|---|---|---|
| English | 5 periods | 5 periods |
| Elective | 5 periods | 5 periods |
| **Household Physics | 7–8 (45 min.) periods | 7–8 (45 min.) periods |
| *Textiles, Millinery and Dressmaking | 3 (90 min.) periods | 2 (90 min.) periods |
| *Elementary Dietetics and Home Management | 2 (90 min.) periods | 3 (90 min.) periods |

## HOUSEHOLD ARTS FOR THE SEVENTH AND EIGHTH GRADES, SPEYER SCHOOL,[1] TEACHERS COLLEGE, NEW YORK CITY

### The Amy Schüssler Apartment

The Amy Schüssler Apartment (described in the January Record) is the outgrowth of a definite course of study in the seventh and eighth grades of the Speyer School.

Following is a tentative outline of that course of study, the result of the coöperation of the departments of household arts education, fine arts education, and elementary education. The committee which represented these departments began by asking, "What should a Speyer School girl know about the art of home-making?" This was the problem which guided the work of the committee in the study of the needs of the children, and in making the course of study to satisfy these needs. To make the course of study as outlined for the eighth grade more vital, an apartment has been chosen, furnished, and operated in part by the children of the eighth grade for three resident Teachers College students under the supervision of the departments concerned as described in the January Record.

In both grades one and one-half hours daily from 2 to 3.30 are spent on the household arts work.

### Seventh Grade

*Main Problem:* "What must a girl of my age know of food, clothing, and cleanliness in order to help my family to keep well and strong and happy?"

[1] Pages 1 to 20 of this pamphlet are reprinted from Teachers College Record, March, 1915, Vol. XVI, No. 2.

SUGGESTIVE PROBLEMS UNDERLYING THE WORK IN CLOTHING, TEXTILES, FOODS, AND SANITATION

I. *Health.*

1. Why is it a thing to be cherished?
2. What can we do to keep well and strong and happy?
3. How can we keep our homes in the best condition for healthful, happy living?
4. What food materials are necessary to keep my body strong and to help it to grow?
5. How shall I cook these foods in order to get the best out of them?
6. How can I be reasonably sure that the food I buy for my family is clean when it comes to the house?
7. What kind of clothing shall I choose so that my body will be allowed the greatest amount of freedom for development and be properly protected at all times?
8. What care shall I give my body so that it will reflect its good condition in an attractive appearance?

II. *Economics.*

1. What foods are most economical to buy in order to get the material I need?
2. With $15 per week to spend for food for a family of five, what are some combinations of dishes I would plan to meet the needs of the family? (Emphasis on cost — simple "balance in diet.")
3. How does the cost of home-made dishes compare with the same foods at the bakery, grocery store, or delicatessen?
4. If I am buying food at the bakery, what can I get which will give me the most for my money?
5. What are some secrets in the buying of foods and household supplies which will help to save money?
6. Of the various articles of clothing I need what can I make at home so that the cost of my wardrobe shall be reduced?
7. What must I know about textile materials so that I can choose and plan my clothing at the least possible expense and get greatest service?
8. What can I do to keep my clothing looking attractive until well worn out?
9. How can I make the parcel post and other utilities an aid to the housekeeper?

III. *Food Preparation and Service.*

1. Foods which I must know how to cook in order to keep a family well and happy
   - *a.* Vegetables.
   - *b.* Eggs.
   - *c.* Meats.
2. How can I serve these dishes so that they will sharpen the appetites of my family? (Simple home service.)
3. What refreshments might we serve at a Hallowe'en party? A July 4th party? (Suggestions for decorating.)
4. Lunch box suggestions, from standpoint of cost and needs of father and daughter.

IV. *Art.*

1. What must I know and do in order to select and purchase clothing that will serve as adornment as well as protection?
2. In what ways do my clothes reflect my character?
3. How will my knowledge of art help me to serve meals attractively?
4. How can I bring beauty into the daily work of the kitchen?

## COURSE OF STUDY

### SEVENTH GRADE

*Problem for the Year.* "What must a girl of my age know of food, clothing, and cleanliness in order to help my family and myself to keep well and strong and happy?"

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| **Problem I.**<br>**A. Of the many things that I have need, what can I make so that I may be helpful with the home sewing?** Make bloomers. What must I know in order to plan for, buy material for, and make a pair of bloomers? | | |
| **B. What must I know about the sewing machine so that I can use it as it should be used?** Emphasis on the use of machine in this problem. | **Problem I. How can I help keep down expenses?** | |
| Oct. 5. *Planning the bloomers.* What material; discussion of comparative suitability of cotton and wool based upon use, economy, and ability of class to handle in making. How much? Interpretation of pattern. | Oct. 6. Visit public market, Fort Lee Ferry. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Oct. 7. *Shopping excursion.* Necessity for plan. Where shop? How to conduct myself? Responsibility toward others when shopping. Comparison of home and ready-made bloomers. Shop on 125th Street. | Oct. 8. *Can peaches.* Shall we can fruit at home or buy it canned? Use of sugar as sirup in canning. Cost. | Oct. 9. *Make apple jelly.* Study commercial methods of canning food. Study of Girls' Canning Clubs in the South. |
| Oct. 12. *Cut out bloomers.* Individual study of pattern, pinning of pattern, cutting out, pinning parts together. | Oct. 13. *Plum preserve.* (Use dried fruit.) Selection of fruit. Utilization of all parts in making jelly and apple butter. Principle of jelly making. Cost. | |
| Oct. 14. *Making bloomers.* Basting and stitching seams. Part-time lesson on use of machine, learn to thread, practice stitching. | Oct. 15. *Sweet pickles.* Use of dried fruit in making of pickles. Acid as a preserving agent. Cost of home-made *versus* commercial product. | Oct. 16. *Care of household plants.* What can we do to make our kitchens and sewing rooms more attractive during the winter? Preparation of window boxes. |
| | **Problem II. My family is made up of busy people. What nourishing foods can I learn to prepare which will be good for luncheon?** | |
| Oct. 19. *Making bloomers.* Machine practice. | Oct. 20. *Milk toast,* with variations. Making of white sauce. Use of left-overs. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Oct. 21. *Making bloomers.* (1 hr.) Half hour — lesson on *wool.* Review of production and manufacture. | Oct. 22. *Creamed vegetables.* Review white sauce. Cookery of vegetables. Rule for cooking starchy foods. | Oct. 23. *Costume design.* Suitability of clothing to individual occasion and income. (Basis for costume design work to follow.) |
| Oct. 26. *Making bloomers.* | Oct. 27. *Hash.* Use of left-overs. Variations in hash. | |
| Oct. 28. *Making bloomers.* Half hour — 2d lesson on *wool,* properties, physical and chemical; testing various samples to learn to detect wool. | Oct. 29. *Cornstarch pudding.* Blending of fine starch and liquid. Thickening power of starch. Variations. Economy. Test for starch. | Oct. 30. *Costume design.* Application of established principles to designing a school coat suitable to 7th grade Speyer School girl. |
| Nov. 2. *Making bloomers.* | Nov. 3. Election day (holiday). | |
| Nov. 4. *Making bloomers.* Half hour — 3d lesson on *wool.* Adulterations, testing unknown samples to determine presence of wool. | Nov. 5. *Serve simple luncheon.* Combination of dishes already prepared. Preparation of several dishes at one time. Simple serving to members of class. | Nov. 6. *Discuss dining] room equipment* (preparation for luncheon). Efficiency in arrangement. Discussion of care of linen, china, brass, and silver. Practical work, class metals. |
| Nov. 9. *Making bloomers.* | Nov. 10. *Make tea;* plan simple luncheon for 75 cents to be served next lesson to four guests. How can we make tea least harmful? "Play" serve luncheon as planned. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Nov. 11. *Making bloomers.* Half hour — 4th lesson on *wool.* Common woolen materials, prices, widths, uses of. Make chart. | Nov. 12. *Serve luncheon to four guests.* Color scheme. Two girls act as hostesses. | Nov. 13. *Costume design.* Finishing of coat design. |
| **Problem II. What must I know in order to care for woolen garments properly? Laundering of woolens; mending, darning of woolens; cleaning; removal of spots.** | **Problem III. What can I do which will help mother to prepare an old-fashioned Thanksgiving Dinner?** | |
| Nov. 16. *Laundering of woolens.* Practical lesson in laboratory. | Nov. 17. *Make corn bread;* prepare *celery.* Value of cornmeal. Value of celery. | |
| Nov. 18. *Wool darning.* Darning hole in dress, or flat woolen garment of some kind. | Nov. 19. *Clean kitchen.* Importance of cleanliness to health and comfort. | Nov. 20. *Visit Old People's Home* to carry jellies and pickles. What can we do to make Thanksgiving happier for these friends? |
| Nov. 23. *Removal of spots from garments.* Brushing, pressing, hanging, keeping free from dust. | Nov. 24. *Prepare a Thanksgiving basket* for family of 6 for $.75. Market list; purchase supplies; pack basket. | |
| Nov. 25. *Plan Christmas gift.* For whom shall I make | Nov. 26. Thanksgiving Day (holiday). | Nov. 27. Holiday. |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| gifts? What can I make that will be worth while and attractive for the amount of money I have? Doing for others. Something for mother, and for some one less fortunate. | | |
| Nov. 30. *Begin Christmas problem.* The emphasis in this series to be put on quality of handwork. | Dec. 1. *Escalloped salmon* or other left-over fish. Review white sauce. Possible variations. | |
| Dec. 2. *Christmas problem.* | Dec. 3. *Emergency biscuits.* Method of combining and handling dough. Use of baking powder. | Dec. 4. *Costume design.* Design for party dress with additional study of color, suitable to individual. |
| Dec. 7. *Christmas problem.* | Dec. 8. *Baking powder biscuits.* Review manipulation; handling the dough on board. Substitutes for butter. Other uses for the dough. | |
| Dec. 9. *Christmas problem.* | Dec. 10. *Serve supper.* Escalloped dish, biscuits, and canned peaches or jelly. Simple service. Cost. | Dec. 11. *Costume design.* Party dress (complete design). Relationship to accessories. |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| | **Problem IV. Preparing for Christmas party to Day Nursery children.** | |
| Dec. 14. *Christmas problem.* | Dec. 15. *Christmas cookies.* Drop batter; variations. Cost of home-made versus bakery products. | |
| Dec. 16. *Christmas problem.* | Dec. 17. *Candy;* popcorn balls. Simple home-made confections. Cost and purity *versus* "store products." | Dec. 18. *Party* to Day Nursery children. Serve candy and popcorn balls. |

## CHRISTMAS HOLIDAYS

| | | |
|---|---|---|
| **Problem III. What should I do to help keep my clothes in repair?** | **Problem V. How can I keep myself well, strong and happy in order to be of greatest joy to my family and friends?** | |
| Jan. 4. *System in household*—looking over wardrobe to see how clothes can be made to last longer. Girls' share in helping. Practical work in darning. | Jan. 5. *Personal hygiene;* bathing, care of teeth, hair, and nails. Fresh air, exercise, sleep. | |
| **Problem IV. What can I do to help mother with household mending? How make things last until Spring or until well worn out?** | | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Jan. 6. *Patching household linen or apron.* Thrift, economy, self-respect. | Jan. 7. *Care of bedroom.* Making bed; care of clothes at night. Ventilation, light, air. | Jan. 8. *Costume design.* School dress (same general art principles applied as above). |
| **Problem V. How can I keep my dresses clean while helping at home?** | **Problem VI. Shall we bake or buy our bread?** | |
| Jan. 11. *Plan apron* (colored gingham). Excursion to store to buy. | Jan. 12. *Study of yeast:* set bread. What is yeast, and what does it demand in order to raise the bread? Reasons for kneading. | |
| Jan. 13. *Cutting out apron.* Adapting patterns to measurements. Review — selvage, warp, woof, gores. | Jan. 14. *Complete bread process.* Reasons for baking. Cost *versus* bakery bread. Variations. | Jan. 15. *Costume design.* School dress (complete design). |
| Jan. 18. *Making apron.* | Jan. 19. *Dutch Apple Cake.* Review biscuits; variation in uses of dough. | |
| Jan. 20. *Making apron.* Half hour to review of cotton production and manufacture. | Jan 21. *Cocoa.* Serve with wafers at informal party to teachers. | Jan. 22. *Written examination.* |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Jan. 25. *Apron.* | Jan. 26. Visit Ward's Bakery. | |
| Jan. 27. *Apron.* Half hour textile lesson. Review weaving; design in cotton. | Jan. 28. *Bread contest.* (Examination week.) 7th and 8th grades contest individually, not as groups. | Jan. 29. *Report of bread contest.* Inspect Teachers College laboratories. |
| | **Problem VII. Dishes suitable for breakfast.** | |
| Feb. 1. *Apron.* | Feb. 2. *Fruits for breakfast.* Value of fruit; dried *versus* fresh fruit. | |
| Feb. 3. Half hour in *textiles.* Characteristics, prices, widths, and uses of common colored cotton materials. Gingham, chambray, percale, calico. | Feb. 4. *Cereals* (granular and flaked). Difference in quantity required of flaked and granular. Study of prepared cereals. | Feb. 5. *House furnishing* principles especially applied to living room; special emphasis on space division in walls, doors, and windows. |
| **Problem VI. What can I make this Spring to wear to school?** | | |
| Feb. 8. *Middy blouse.* Its use? What kind of material, how much, what should it cost, shall I buy or make? Excursion to 125th Street store. | Feb. 9. *Uses of left-over cereals,* molded with fruit; sautéed; served with sirup. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Feb. 10. *Textile lesson.* Study of white materials suitable to outside garments that get hard wear. Characteristics, widths, prices, advantages and disadvantages. Discussion of suitability of trimmings, study pattern, make chart. | Feb. 11. *Creamed dried beef or codfish.* Other suggestions for breakfast dishes; food value. | Feb. 12. *House-furnishing;* relation of color scheme to exposure of room. |
| Feb. 15. *Review pattern. Cut out middy.* Begin to put together. | Feb. 16. *Ways of warming over potatoes.* Creamed; sautéed; escalloped. | |
| Feb. 17. *Middy.* | Feb. 18. *Muffins.* Drop batter; variations possible. Relation to cake. | Feb. 19. *House-furnishing;* principles relating to furnishings, hangings, pictures; furniture. |
| Feb. 22. *Middy.* | Feb. 23. *Egg cookery.* Begin study of protein cookery. Value of eggs as food. Various foods needed by body. | |
| Feb. 24. *Middy.* | Feb. 25. *Make cocoa;* plan menu for breakfast. Food value of cocoa as compared with tea and coffee. | Feb. 26. *Wash aprons;* principle involved in washing colored clothes. Make starch. Hanging clothes on line. (These aprons were made in sewing class.) |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Mar. 1. *Middy.* | Mar. 2. *Mock service* for breakfast; make market list; cost. Suggest other menus of greater or less cost. | |
| Mar. 3. *Middy.* | Mar. 4. *Serve breakfast* to six for $1.00. | Mar. 5. *Iron aprons;* care in sprinkling and folding. |
| **Problems VII and VIII. With my present ability and need, what undergarments can I make?** | **Problem VIII. How shall we launder the table linen?** | |
| Mar. 8. *Last lesson on middy.* Discussion of underwear. Styles and quality adapted to girls' use. | Mar. 9. *Wash tablecloth, napkins; and doilies;* (only *white articles*). Why wash clothes? Removal of stains. | |
| Mar. 10. *Begin work on night gown* with discussion of suitability of material for underwear. Study samples, width, prices. Plan the night gown. | Mar. 11. *Iron same.* Why? Care in sprinkling; folding. | Mar. 12. *Visit laundry.* How does the laundryman handle the large washing? The mangle as a labor saver. Possibility of a home mangle. |
| | **Problem IX. Planning for the Spring party.** | |
| Mar. 15. *Night gown.* | Mar. 16. *Make cookies* (rolled). Review mixing process given Dec. 15. Rolling process added. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Mar. 17. *Night gown.* Suitability of trimmings for underwear; laces, embroidery, ribbons, handwork, etc. | Mar. 18. *Make milk sherbet.* Freezing principle, combining milk and acid. | Mar. 19. *Preparation for parents' meeting.* Make sherbet, use cookies made on Mar. 16. |
| | **Problem X. Planning and serving the dinner.** | |
| Mar. 22. *Night gown.* | Mar. 23.[1] *Cream soups.* Application of white sauce principle. Puree. Food value. | |
| Mar. 24. *Night gown.* | Mar. 25. *Meat soup,* with vegetables. Use of soup meat in hash or stew. | Mar. 26. *Reupholstering.* How can we make shabby pieces of furniture attractive and comfortable? |
| | **EASTER VACATION** | |
| Apr. 5. Easter Monday. | Apr. 6. *Meat balls and tomato sauce.* Continue cookery of protein. Retention of juices. Use of bread crumbs and egg. Seasoning. | |
| Apr. 7. *Night gown.* | Apr. 8. *Stew.* Partial extraction and partial retention of juices. Economy in use of cheaper cuts of meat. Fireless cooker. | Apr. 9. *Cleaning;* kitchen and pantries. Sanitation of plumbing and refrigerators. |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Apr. 12. *Night gown.* | Apr. 13. *Stuffed potatoes and mashed potatoes.* Cookery of vegetables; variation in cookery of potatoes. | |
| Apr. 14. *Night gown.* | Apr. 15. *Escalloped vegetables;* review cookery of vegetables. Palatable use of left-overs. | Apr. 16. *Visit market.* What can we serve economically at this time of year? Get prices of vegetables, fruits, and meats. |
| Apr. 19. *Night gown.* | Apr. 20. *Salad,* French dressing. Heavy *versus* light salads; place in meal. Characteristics of good salad. Food value. | |
| Apr. 21. *Finish gown.* | Apr. 22. *Salads,* boiled dressing. Fruit or meat salad. When use each? Accompaniments. Value of greens in diet. | Apr. 23. *Cleaning;* dining room; woodwork and glass. |
| Apr. 26. *Begin underskirt.* Review suitability of material. Take measurements, estimate amount of material needed. Study of pattern. | Apr. 27. *Custards.* Application of rule for cooking protein. Nourishing dessert. When serve · variations in use. | |
| Apr. 28. *Underskirt.* | Apr. 29. *Gelatine puddings.* Source of gelatine, value as food. Variations. | Apr. 30. *Care of accessories* in clothing. How shall I care for my gloves, ribbons, yokes, rubbers, shoes, etc.? |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| May 3. *Underskirt.* | May 4. *Cakes.* Review process of cooky making. Classes of cakes. | |
| May 5. *Underskirt.* | May 6. *Cakes,* icings. Review for manipulation. | May 7. *Cake sale,* to earn money for dinner to follow (sell cakes made May 4 and 6). |
| May 10. *Underskirt.* | May 11. *Plan dinner* for six for $1.50. *a*) Mock service. (*b*) Market order. Review processes of cookery. Balance in diet. | |
| May 12. *Underskirt.* | May 13. *Serve dinner.* Emphasis on attractive, quiet service and promptness and regularity in getting dishes ready. | May 14. *Put clothes away* for summer. Practical lesson in storage of woolen garments or furs. |
| | **Problem XI. Preparing the kitchen to leave for the summer.** | |
| May 17. *Underskirt.* | May 18. *Take inventory;* classify equipment according to materials. | |
| May 19. *Underskirt.* | May 20. *Clean kitchen;* and prepare equipment to leave for summer. Oil stoves and metal. | May 21. *Make sandwiches.* Visit Van Cortlandt Mansion. Packing the picnic lunch box. Balance in diet. Kitchens in colonial days. |

### Eighth Grade

*Main Problem:* "What are the main problems which confront the Yorke family, who find that they must live in this neighborhood in New York City?" (Family consists of Mr. and Mrs. Yorke, Mr. Yorke's father, and three children, Jane aged 14, William aged 8, and Alice aged 2. Income $1200.)

I. Where shall we live? (Introducing division of income.)
II. How divide the responsibility of housekeeping business?
III. How much shall we spend for clothes?
IV. How much shall we spend for food?
V. How shall we furnish the house most tastefully considering expense?
VI. How much should we aim to save each year?
VII. How shall we get our recreation?
VIII. Upon what will the health of the family depend?
IX. What are our responsibilities outside the four walls of our home?
    1. Church associations.
    2. Neighborhood ethics.
    3. Civic housekeeping.
    4. Pure food.
    5. Market, bakery, and laundry conditions. (How can Mrs. Yorke and Jane help other housekeepers to get a "square deal"?)
    6. Full weight.
    7. Philanthropies.
    8. Consumers' League.
    9. Child Labor.
    10. Textile adulteration.
X. Where can we spend a part of our summers so that the children will not lose all the fun of country life, and still that Father may not be left to "shift for himself" during the family holiday?
XI. How can we bring the country to our city home?
XII. Where can Mother and the children go during the summer days for one day excursions?
XIII. What special comforts will Grandfather need?
XIV. What kinds of foods do the various members of the family need?
XV. What food combinations are pleasing in meals?

XVI. How can the meals be prepared in order to have everything ready at the same time?

XVII. How can Mrs. Yorke and Jane serve the meals without disturbing the family by leaving the table?

XVIII. For special occasions Dinah comes in to help Mrs. Yorke. How do they serve the dinner?

XIX. The relation of economy to efficiency in the Yorke family's home life.

XX. What kind of clothing shall the children have for various occasions?

XXI. Shall we buy or make our clothing?

XXII. Under what conditions and by whom are various garments manufactured?

XXIII. When shall the wardrobes and house furnishings be replenished?

XXIV. What is Jane's duty to herself in planning her life in order to make her high-school life most efficient?

XXV. How can I prepare myself to be a helpful factor in the community?

### Eighth Grade

*Problem for the Year.* What are the main problems which confront the Yorke family who find that they must live in this neighborhood in New York City? (Family consists of Mr. and Mrs. Yorke, Mr. Yorke's father, and three children, Jane aged 14, William aged 8, and Alice aged 2. Income, $1200.)

In this course, emphasis is laid on repetition of manipulation, for skill and technique. Principles of Foods, Clothing, and Shelter as taught in Grade 7 form basis for work in Grade 8.

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| | | Oct. 2. *Select apartment.* Inspecting apartments for purpose of selecting one suited to the needs of Yorke family. |
| **Preparation for Starting Housekeeping.** | | |
| Oct. 5. *Visit public market.* | Oct. 6. *What will the Yorke family need* to make their apartment comfortable and attractive? (Study of the apartment as a whole.) Decision of color scheme for rooms. | |
| Oct. 7. *Canning* — Making jelly. Why do some fruits jelly and others not? | Oct. 8. *House furnishings.* Continuation of selection of color scheme and types of furniture. | Oct. 9. *House furnishing.* Choice and selection. Apportionment of $200 to be spent for furnishing and determination of necessary articles for each room. |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Oct. 12. *Plan equipment* for kitchen; make list; estimate cost. | Oct. 13. *House furnishing.* Continuation of lesson on Oct. 9. | |
| Oct. 14. *Visit Macy's* to buy equipment. | Oct. 15. *House furnishings.* Selection of furnishings for bedroom. Excursion. | Oct. 16. *House furnishing.* Choice and selection. Excursion for selection of dining room and living room furniture. |
| Oct. 19. *Continue buying at Koch's.* | Oct. 20. *House furnishings.* Selection of furniture for dining room and living room. | |
| Oct. 21. *Make inexpensive cake.* | Oct. 22. *House furnishings.* Continuation of previous two lessons. | Oct. 23. *Clean apartment.* |
| Food Requirements of family. | | |
| Oct. 26. *Clean apartment.* | Oct. 27. *House furnishings.* Arrangement of furnishings purchased. | |
| Oct. 28. *Apple compote.* Variation in use of apples. | Oct. 29. *House furnishings.* Making of hangings, curtains, etc., for apartment. | Oct. 30. *Home ideals.* Love and service in the home. Discussion of quotations and stories which idealise home life. Making home attractive. |
| Nov. 2. *Settle kitchen.* | Nov. 3. Election Day. (Holiday.) | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Nov. 4. *Inexpensive luncheon dishes.* Make Turkish pilaf. | Nov. 5. *House furnishings.* Continue sewing on curtains and other furnishings. | Nov. 6. *Suitability of dress,* to individual, to occasion, to season, to purse. Fads and fashions, extremes in clothing. |
| Nov. 9. *Budget.* For the Yorke family based on apportionment in "Cost of Living," Ellen H. Richards. | Nov. 10. *House furnishings.* | |
| Nov. 11. *Personal hygiene.* Care of bedroom. Clean bedroom, make bed, care of clothing at night. Review health requirements. | Nov. 12. *House furnishings.* | Nov. 13. *Hygiene of clothing.* Health as affected by clothing — proper underwear, shoes, stockings, suited to the weather; changing frequently; aired and cleansed. |
| **Thanksgiving Lessons.** | | |
| Nov. 16. *Steamed suet pudding.* Soda and molasses as leavening agent. Cost. Commercial "Plum Pudding." Comparison. | Nov. 17. *House furnishings.* | |
| Nov. 18. *Cookies for Parents' Evening.* | Nov. 19. *House furnishings.* | Nov. 20. *Costume design.* Direct application of principles established in Grade 7 to designing of lingerie dress and spring hat to be made later. |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Nov. 23. *Plan Thanksgiving basket*; marketing. (Basket to be sent to needy family.) Cost, $1.00. Balance in diet. | Nov. 24. *Child's clothing.* What kind of clothing will the 2-year-old child need? Selection of garments with regard to comfort and physical properties of material for warmth, durability, etc. Plan and cut out garment. | |
| Nov. 25. *Prepare basket* and send out to needy family. | Nov. 26. Thanksgiving. (Holiday). | Nov. 27. Thanksgiving. (Holiday). |
| Nov. 30. *Breakfast series.* Creamed foods on toast. Review of processes taught in Grade 7. Original thought in variation. | Dec. 1. *Work on child's garment.* Discussion, coöperation among members of the family; caring for children, with emphasis on the part the school girl can take in the home. | |
| Dec. 2. *Warmed-over potatoes.* Use of cook book to discover various ways of using left-over potatoes. | Dec. 3. *Continue work on child's garment.* Discussion of hygiene of underwear. | Dec. 4. *Costume design.* (Continuation of lesson on Nov. 20.) |
| **Christmas Lessons.** | | |
| Dec. 7. *Orange or grapefruit marmalade,* a winter delicacy. Variations. | Dec. 8. *Continue work on child's garment.* Estimate cost of child's clothing. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Dec. 9. *Complete same.* Put into glasses, seal, and cover neatly. Jelly making as a vocation for girls. | Dec. 10. *Continue on child's garment.* | Dec. 11. *Decorate apartment* in preparation for Christmas party, emphasizing simplicity and suitability to occasion as discussed in art lessons. Christmas ideals. |
| Dec. 14. *Fondant.* (Use on Dec. 16 in making bonbons.) "Why are bonbons so expensive?" | Dec. 15. *Finish child's garment.* Discussion. How can the Yorke family economize by making over and keeping clothes in repair? | |
| Dec. 16. *Bonbons* from same. Dangers from cheap candies. What firms can be depended upon? How do we know? | Dec. 17. *Packing Christmas box* for needy family; child's garment included. | Dec. 18. Yorke family gives *Christmas party* in apartment. Girls dressed to represent members of family. Part of host and hostess in the home. |
| CHRISTMAS HOLIDAYS | | |
| **Continue Breakfast Series.** | | |
| Jan. 4. *Plan simple breakfast.* Menu costs. | Jan. 5. *What kind of table linen* shall the Yorke household need? What should Mrs. Yorke know before buying? Testing linens for strength and adulterations. Mounting samples of different widths, prices, and qualities. | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Jan. 6. *Serve simple breakfasts.* Costs. Groups of 2, develop menu, count cost, serve. | Jan. 7. *Shopping excursion.* Given a definite sum, what kind of tablecloth and napkins shall we buy? January sales; bargains; remnants; advertisements. | Jan. 8. *Costume design.* (Continuation of lesson on Dec. 4.) |
| Jan. 11. *Make doughnuts* for tea. | Jan. 12. *Begin work on hemming table linen.* Discussion on kinds of towels for face and bath. Hygienic use of individual towels, public and at home. Comparison of linen and cotton. | |
| Jan. 13. *Make coffee;* serve refreshments. | Jan. 14. *Work on hemming table linen.* What kinds of bed linen does this family need? How buy it? Shall it be home-made or not? Qualities and prices. | Jan. 15. *Costume design.* (Continuation of lesson on Jan. 8.) |
| Jan. 18. *Bread,* white and brown. Review yeast and its needs. Study of flour — relation of gluten to protein. | Jan. 19. *Continue the work on table linen.* Discuss mattresses and pillows and blankets. | |
| Jan. 20. *Bread.* Care of bread in the home. Uses of left-over bread. Why is bread the "staff of life?" | Jan. 21. *Work on linen.* Continue discussion on household linens. | Jan. 22. *Written examination.* |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Jan. 25. *Visit Ward's Bakery.* | Jan. 26. *Written lesson first* 45 *min.* Plan for skirt to be worn with middy blouse. Suitability of material, prices, widths; take measurements. | |
| Jan. 27. *Bread contest.* Individual contest between 7th and 8th grade girls. | Jan. 28. *Study of skirt pattern;* placing on goods, cutting out skirts. | Jan. 29. *Visit Teachers College.* Inspect equipment. |
| Feb. 1. *Cream soups.* Review process from Grade 7. Food value. Accompaniments. When serve? | Feb. 2. *Work on skirts.* | |
| Feb. 3. *Escalloped dishes.* (Individual choice so far as possible.) | Feb. 4. *Continue work on skirts.* | Feb. 5. *Costume design,* continuation of design for dress. |
| Feb. 8. *Launder linen* hemmed by girls for apartment. General plan for family laundry work. | Feb. 9. *Continue work on skirts.* | |
| Feb. 10. *Iron linen.* Care of linen in the home. | Feb. 11. *Continue work on skirts.* | Feb. 12. *Costume design.* (Continued.) |
| Feb. 15. *Fruit as desserts* (fresh and stewed). Food value. Attractive service. Importance of study of markets. Selection. | Feb. 16. *Continue work on skirts.* | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Feb. 17. *Plan luncheon* for $1.00 for six. Mock service. Make tea. Calculate calories supplied. | Feb. 18. *Continue work on skirts.* I shall soon need a new spring hat. Shall I make one or buy one ready-made? Estimate probable cost of each. Plan for excursion to follow. | Feb. 19. *Visit wholesale millinery house* for hat materials. |
| Feb. 22. Holiday. | Feb. 23. *Continue and finish skirt.* Estimate exact cost; compare with ready-made as to cost, durability, workmanship, etc. Who makes the ready-made garments? Under what conditions? | |
| Feb. 24. *Serve luncheon* to Yorke family — home service, Jane's part. | Feb. 25. *Begin work on spring hat.* The various processes of reënforcing brim, sewing on straw, lining and trimming to be taken up as need calls for them. | Feb. 26. *Consumers' League.* Child labor — garment making, making artificial flowers, etc. |
| **Dinner Series.** Mar. 1. *Meat cookery.* Review principle of protein cookery. Attractive service of inexpensive cuts. | Mar. 2. *Work on spring hat.* | |
| Mar. 3. *Fish cookery.* Food value of fish. Fish chowders. Baked fish. | Mar. 4. *Continue hat.* | Mar. 5. *Webber's Market;* study of cuts of meat; sanitation; cold storage. Government inspection. |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Mar. 8. *Vegetable cookery.* Review principle of carbohydrate cookery. Relative food values of different vegetables. | Mar. 9. *Continue on hat.* | |
| Mar. 10. *Vegetable salads.* Boiled dressing, French dressing. | Mar. 11. *Continue on hat.* | Mar. 12. *Series of lessons on foresight in planning life in high school or business.* |
| Mar. 15. *Salads,* fruit, mayonnaise dressing. | Mar. 16. *Hat.* How can I make use of some of my old trimmings? Lesson on renovating and pressing worn velvets and trimmings. | |
| Mar. 17. *Custards;* baked and boiled. | Mar. 18. *Trim hat.* | Mar. 19. *Continue series of Mar.* 12. |
| Mar. 22. *Plan dinner for six* for $1.50. Make gelatine pudding. | Mar. 23. *Continue on hat.* | |
| Mar. 24. *Serve dinner.* | Mar. 25. *Finish hat.* | Mar. 26. Easter holidays. |
| EASTER HOLIDAYS | | |
| | **Looking Ahead to Summer.** | |
| Apr. 5. Monday after Easter, holiday. | Apr. 6. *What kind of a summer afternoon dress* can Jane Yorke have if she makes it herself? How much should she spend? Discussion of suitability of materials, prices, widths, etc. How much material is required? | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Apr. 7. *Comfort* for grandfather; his place in the home; his favorite dishes. How entertain him? | Apr. 8. *Shopping excursion to buy* materials and patterns. Make effort to keep design simple and to purchase materials which are not too difficult to handle. | Apr. 9. *Continue series of Mar.* 12. |
| Apr. 12. *Home nursing.* Simple care of some one who is not quite well for a few days. Suggestions for comfort and pleasure. | Apr. 13. *Begin work on dress.* | |
| Apr. 14. *Invalid cookery.* Review and application of dishes already prepared. Attractive service. | Apr. 15. *Work on dress.* The various processes in the making of the dress will be taken up as demand calls for them. | Apr. 16. *Continue series.* |
| Apr. 19. *Plan summer holiday luncheon basket.* | Apr. 20. *Work on dress.* | |
| Apr. 21. *Planning for the summer holiday excursion.* The two weeks' vacation. | Apr. 22. *Work on dress.* | Apr. 23. *Continue series.* |
| Apr. 26. *Laundry work.* Washing of furnishings in apartment, linens, bedding, etc. | Apr. 27. *Work on dress.* | |

| MON. AND WED. | TUES. AND THURS. | FRIDAY |
|---|---|---|
| Apr. 28. *Laundry work.* Iron same. | Apr. 29. *Work on dress.* | Apr. 30. *a. Kitchen and laundry pests,* extermination of flies, cockroaches, ants, mice. Cleanliness as prevention. *b.* Visit to *commercial laundry.* Study of sanitation and conditions, for workers. "White list." |
| May 3. *Care of babies;* dangers in pacifiers, etc. Bathing, dressing, etc. (Lesson taught by trained nurse, if possible.) Danger of flies. | May 4. *Work on dress.* | |
| May 5. *Baby feeding;* visit to milk station. What does New York City do to help the babies? | May 6. *Work on dress.* | May 7. *Storage of clothing. Clothing pests.* Practical lesson in storage of furnishings of apartment. |
| May 10. *Cookies for reception.* Emphasis upon perfection in products. Cost. | May 11. *Work on dress.* | |
| May 12. *Cake for reception.* Make boiled frosting. Variations. | May 13. *Finish dress.* | May 14. *Make ice cream* for evening reception to teachers of Speyer School and friends. Plan for evening party. Floral decoration. |

## COMPLETE LIST OF FURNISHINGS

### For the Amy Schüssler Apartment

#### LIVING ROOM

| | | | |
|---|---|---|---|
| 1 Oil lamp complete | $4.85 | Forward | $39.16 |
| 1 Desk blotter | .05 | 1 Wood straight chair | 1.89 |
| 1 Waste basket | .50 | 1 Couch | 5.67 |
| 2 Pictures framed (Pictures from *Times* Supplement) | 1.20 | 1 Mattress | 4.63 |
| | | 2 Pillows | 1.18 |
| | | 4 Curtain rods | .40 |
| 1 Blanket for couch | 3.39 | 1 Brass candlestick | .45 |
| 1 Comforter for couch | 1.98 | 2 Small brass vases | .40 |
| 2 Pillow cases for couch | .34 | 2 Pair cheesecloth curtains | .80 |
| 3 Sheets | 1.56 | | |
| 3 Huck towels | .75 | 2 Pair chintz curtains | .80 |
| 2 Bath towels | .38 | 1 Couch cover (materials) | .75 |
| 1 Desk table | 5.30 | 1 Chiffonier cover | .12 |
| 1 Chiffonier | 7.55 | 1 Cover for desk | .12 |
| 1 Crex rug | 3.48 | 1 Pair portières (12 yd.) | 2.00 |
| 1 Wicker arm chair | 4.49 | 2 Pillow covers on couch | .30 |
| 1 Wooden rocker | 3.34 | 1 Pair bookcase curtains | .30 |
| | $39.16 | 1 Bayberry candle | .10 |
| | | Total | $59.07 |

#### DINING ROOM

| | | | |
|---|---|---|---|
| 1 Cream pitcher<br>1 Sugar bowl | $ .25 | Forward | $23.32 |
| | | 6 Knives | 1.74 |
| 6 Oak cane-seat chairs | 7.50 | 12 Tumblers | .48 |
| 6 Dessert dishes | .60 | 6 Oatmeal dishes | .90 |
| 1 Water pitcher | .10 | 6 Dinner plates | 1.20 |
| 1 Fish globe | .10 | 6 Tea plates | .90 |
| 2 Shakers | .20 | 6 Bread and butter plates | .60 |
| 1 Crex rug | 3.48 | 6 Cups and saucers | 1.24 |
| 1 Serving table | 7.49 | 2 Open vegetable dishes | .98 |
| 12 Teaspoons | 1.24 | 1 Platter | .79 |
| 6 Dessert spoons | 1.12 | 1 Platter | .49 |
| 6 Forks | 1.24 | 2 Curtain rods | .20 |
| | $23.32 | | $32.84 |

| | |
|---|---|
| Forward | $32.84 |
| 1 Carving set | .74 |
| 1 Table (plus stain .57) | 4.70 |
| 1 Brass tray | .80 |
| 1 Pair cheesecloth curtains | .40 |
| 1 Pair chintz curtains | .50 |
| 2 Table runners of Japanese toweling | .56 |
| | $40.54 |

| | |
|---|---|
| Forward | $40.54 |
| 1 Cover for serving table | .28 |
| Framing three pictures | 1.20 |
| 1 Bracket | .20 |
| 1 Bowl | .10 |
| 1 Silence cloth | .90 |
| 1 Tablecloth | 1.88 |
| ½ Dozen napkins | 1.63 |
| Total | $46.73 |

KITCHEN

| | |
|---|---|
| 1 Step ladder chair | $1.43 |
| 2 Pot covers | .12 |
| 1 Pot cover | .08 |
| 1 Sauce pan | .24 |
| 1 Butter crock | .33 |
| 1 Flour canister (10 lb.) | 1.02 |
| 1 Mop | .35 |
| 2 Curtain rods | .20 |
| 1½ yd. oilcloth for tops of tubs | .30 |
| 2 Knives | .14 |
| 1 Pallet knife | .21 |
| 1 Chop knife | .22 |
| 1 Knife and fork | .15 |
| 2 Spoons | .12 |
| 2 Spoons | .22 |
| 1 Knife | .29 |
| 1 Can opener | .08 |
| 1 Dozen hooks | .10 |
| 1 Scrub brush | .14 |
| 1 Vegetable brush | .03 |
| 1 Sauce pan | .33 |
| 1 Double boiler | .93 |
| 1 Coffee pot | .74 |
| 1 Kettle | 1.24 |
| 1 Soup strainer | .18 |
| | $9.19 |

| | |
|---|---|
| Forward | $ 9.19 |
| 1 Soap shaker | .08 |
| 1 Sink strainer | .11 |
| 1 Potato masher | .08 |
| 1 Garbage can | .39 |
| 1 Scrub pail | .19 |
| 1 Fry pan | .15 |
| 1 Fry pan | .05 |
| 1 Roast pan | .44 |
| 1 Chop bowl | .22 |
| 1 Roll pin | .10 |
| 1 Bread board | .32 |
| 2 Bread pans | .38 |
| 1 Brush | .49 |
| 1 Egg beater | .05 |
| 6 Mason jars | .25 |
| 6 Mason jars | .30 |
| 1 Yellow bowl | .42 |
| 1 Yellow bowl | .16 |
| 1 Salt box | .29 |
| 1 Broom | .35 |
| 1 Dust pan | .12 |
| 1 Bread box | .66 |
| 1 Sugar can | .63 |
| 1 Colander | .40 |
| 1 Dish pan | .25 |
| | $16.07 |

| | |
|---|---|
| Forward | $16.07 |
| 2 Pie tins | .14 |
| 1 Boiler | 1.69 |
| 1 Muffin tin | .30 |
| 1 Wash basket | .59 |
| 1 Ironing board | .59 |
| 1 Set irons | 1.25 |
| 50 Clothes pins | .09 |
| 1 Wash board | .55 |
| 1 Towel roller | .35 |
| 1 Line | .49 |
| 1 Pan | .19 |
| | $22.30 |

| | |
|---|---|
| Forward | $22.30 |
| 1 Spoon | .11 |
| 1 Soap dish | .15 |
| 1 Measuring cup | .11 |
| 1 Window sash curtain | .12 |
| 1 Pair curtains for cupboard | .15 |
| 1 Bracket | .20 |
| 1 Plant | .50 |
| 1 Glass holder | .10 |
| Oilcloth for window box | .30 |
| 6 Dish towels | .75 |
| 6 Dish cloths | .35 |
| Total | $25.14 |

BATHROOM

| | |
|---|---|
| 1 Roll paper holder | $ .10 |
| 1 Toilet brush | .10 |
| 1 Bath mat | .50 |
| 3 Towel racks at 10 cents | .30 |
| 1 Mirror | 1.24 |
| | $2.24 |

| | |
|---|---|
| Forward | $2.24 |
| 1 Curtain rod | .10 |
| 1 Pair cheesecloth curtains | .12 |
| 1 Shelf — white | .94 |
| 1 Soap dish | .38 |
| Total | $3.78 |

FRONT BEDROOM

| | |
|---|---|
| 1 Desk blotter | $ .05 |
| 1 Oak mirror | 1.75 |
| 1 Blanket for bed | 3.39 |
| 1 Comforter for bed | 1.98 |
| 2 Pillow cases | .42 |
| 3 Sheets | 1.56 |
| 3 Huck towels | .75 |
| 2 Bath towels | .38 |
| 2 Closet bars for clothes | .20 |
| 1 Bureau | 6.80 |
| 1 Rag rug | 1.19 |
| 1 Wicker arm chair | 4.49 |
| 1 Bed | 3.24 |
| 1 Spring | 3.34 |
| | $29.54 |

| | |
|---|---|
| Forward | $29.54 |
| 1 Mattress | 5.19 |
| 1 Pillow | 1.09 |
| 1 Table for desk | 1.89 |
| 2 Curtain rods | .20 |
| 1 Pair cheesecloth curtains | .40 |
| 1 Pair of over curtains (Japanese toweling) | .50 |
| 1 Bed cover and pillow cover (materials) | 1.50 |
| 1 Cover for desk table (Japanese toweling) | .17 |
| 1 Bureau cover (materials) | .11 |
| 1 Chair cushion cover | .22 |
| Total | $40.81 |

BACK BEDROOM

| | | | |
|---|---|---|---|
| 1 Desk blotter | $ .05 | Forward | $34.36 |
| 1 Oak mirror | 1.75 | 1 Table for desk | 1.89 |
| 1 Blanket for bed | 3.39 | 2 Curtain rods | .20 |
| 1 Comforter for bed | 1.98 | 1 Brass vase for desk | .20 |
| 2 Pillow cases | .34 | 1 Pair cheesecloth curtains | .40 |
| 3 Sheets | 1.56 | 1 Pair over curtains (Japanese toweling) | .63 |
| 3 Huck towels | .75 | 1 Couch cover (materials) | .75 |
| 2 Bath towels | .38 | 1 Desk cover (Japanese toweling) | .14 |
| 2 Closet bars for clothes | .20 | 1 Bureau scarf (Japanese toweling) | .21 |
| 1 Bureau | 6.80 | 1 Pillow cover | .14 |
| 1 Rag rug | 1.19 | 2 Pillow covers on couch | .30 |
| 1 Wicker arm chair | 4.49 | | |
| 1 Couch | 5.67 | | |
| 1 Mattress | 4.63 | | |
| 2 Pillows | 1.18 | | |
| | $34.36 | Total | $39.22 |

TOTAL

| | |
|---|---|
| Dining room | $46.73 |
| Living room | 59.07 |
| Front bedroom | 40.81 |
| Back bedroom | 39.22 |
| Kitchen | 25.14 |
| Bathroom | 3.78 |
| | $214.75 |

## TENTATIVE COURSE IN HOUSEHOLD ARTS FOR HORACE MANN SCHOOL SIXTH GRADE AND JUNIOR HIGH SCHOOL

Special lessons for Christmas, Girl's League Fair, Red Cross, or other school events are substituted when advisable.

GRADE VI

*Problem for year.*

Food and clothing are prepared for use in our homes. Do you know how this is done? Can you help?

*Problem A.* (Either half year.) 15 lessons. (1 hour each.)
How are the different kinds of foods prepared for the table? (This series of lessons should result in the preparation and serving of simple meals.)

*Problem B.* (Either half year.) 15 lessons. (1 hour each.)
What can I learn about sewing that would be useful to me at home or enable me to make gifts for others? (This series should result in the making of a cooking cap and apron and gifts or articles for the Girl's League Fair.)

*Correlated Studies.* Art. 2 periods per week. 70 minutes each.
Hygiene. 1 period, 70 minutes per week.

*Problem A.* (Stated above.)

Problem I. We would like to learn to prepare enough dishes so that we could serve a luncheon.

Lesson 1. Introduction to laboratory equipment.
Lesson 2. Boiled rice.
(*a*) How to cook cereals.
(*b*) What we mean by starchy foods.
(*c*) How to wash dishes.
Lesson 3. Cheese sauce.
(*a*) How to make cream sauce.
(*b*) How to cook cheese.
Lesson 4. Cocoa.
(*a*) Cooking another starchy food.
(*b*) Great value of milk.
Lesson 5. Apple sauce.
(*a*) Why we want fruit for our luncheon.
Lesson 6. Sandwiches.
(*a*) How to make attractive, appetizing sandwiches.
(*b*) Use of war breads.
Lesson 7. Planning of luncheon.
(*a*) Setting table.
(*b*) Serving.
(*c*) Courtesies to guests.
Lesson 8. Serving luncheon with two guests.
Lesson 9. Work on notebooks. Written lesson.

Problem II. What can we learn to make in school which our mothers would like to have us make at home?

Lesson 10. Corn muffins.
(*a*) Action of baking powder.
(*b*) Value of careful measurements.
Lesson 11. Drop cookies.
(*a*) Use of ovens.
Lesson 12. Scalloped salmon.
(*a*) Review cream sauce.
Lesson 13. Potato soup.
(*a*) Value of cream soups and when to use them.
Lesson 14. Log Cabin salad. Written lesson.
(*a*) Bananas are another starchy food.
Lesson 15. Cleaning and putting desks in order.
(*a*) Necessity for cleaning up after cooking something at home.

*Problem B.* (Stated above.)

Problem I. Making an apron for the cooking class.

Lesson 1. Planning cooking apron.
(*a*) Discussion of different kinds of aprons. Reasons for choosing special kind.
(*b*) Suitable materials. Long cloth wears well and washes well.
(*c*) Comparison of cost of aprons made at school, and one bought.
(*d*) Correct way of using tools: needle, thimble, scissors.
Lesson 2. Turning and basting narrow hems on aprons.
Lessons 3–4. Hemming apron.
Lessons 5–6. Cross stitch initials in corner of apron to identify them. Discussion of various kinds of lettering and their uses. Old samplers.
Lesson 7. Sewing on tapes. Discussion of various methods.

Problem II. Making a bag using design made in the Art class for appliqué.

Lesson 1. Planning bag.
(*a*) Suitable and attractive materials: chambray, sateen, unbleached muslin dyed.
(*b*) Color combinations.
(*c*) Cutting bag and pieces for appliqué.

Lesson 2. Turning and running edges of pieces to keep them from fraying.

(*a*) Basting pieces in position, according to design made in paper.

Lessons 3–4. Work on appliqué.

Lessons 5–6. French seam.

(*a*) Two runs and a back stitch.

Lessons 7–8. Hems at top.

(*a*) Making woven loop and cords.

In place of this bag the following problem might be substituted:

Problem II. Making a cap for the cooking class.

NOTE. Lessons 1 to 15 may be devoted to making Red Cross supplies if necessity demands.

### I. HIGH SCHOOL (GRADE VII)

*Problem for the year.*

The preparation of food, and the selection, making, and care of clothing requires much time in the home.

What can I learn to do at school which will enable me to do my share at home and in school, or for others?

60 lessons. (2 double periods weekly.) (160 minutes.)

*Correlated Studies.*

Geography.

*Problem A.* What are some foods I have at home or at school which I could learn to prepare?

30 lessons. (1 double period weekly.)

Problem I. What shall I put into the luncheon box which I pack for school, and how can I pack it attractively?

Lesson 1. Sandwiches.

(*a*) Selection of food for box luncheon.

(*b*) Discussion of many kinds of sandwiches, and making of two kinds.

Lesson 2. Stuffed eggs.

(*a*) Selection of food continued.

(*b*) How to cook eggs.

Lesson 3. Cocoa.

(*a*) How to pack a luncheon box attractively.

(*b*) Review the making of cocoa.

Problem II. What do we need to learn to serve nicely a simple luncheon in our school dining room?

Lesson 4. Baked potatoes.
- (a) Starch experiment.

Lesson 5. Spaghetti and cheese.
- (a) Making cream sauce.
- (b) Cheese as a meat substitute.

Lesson 6. Chocolate cornstarch pudding.
- (a) Corn as a wheat substitute.
- (b) Cooking of starch.

Lesson 7. Written lesson, and notebooks.

Lesson 8. Cream of lima bean soup.
- (a) Value of cream soups in child's diet.
- (b) Starch continued.

Lesson 9. Pittsburg potatoes.
- (a) Patriotic use of potatoes.
- (b) Review cream sauce.
- (c) Cooking of cheese.

Lesson 10. English Monkey.
- (a) Use of dry bread.
- (b) Use of cheese in diet.

Lesson 11. Oat-flour muffins.
- (a) Wheat substitutes.
- (b) Action of baking powder.

Lesson 12. Khaki biscuits.
- (a) Other wheat substitutes.
- (b) Review baking powder.

Lesson 13. Table service.
- (a) Setting table.
- (b) Serving.
- (c) Planning menu from previous lessons.

Lesson 14. Luncheon.
- (a) Organization of work.
- (b) Cooking in larger quantities.

Lesson 15. Bean loaf.
- (a) Meat substitutes.

Lesson 16. Potato soup.
- (a) Suggest many uses for potatoes.
- (b) Suggest menus containing cream soup.

Lesson 17. Apple sauce. Notebooks.
(*a*) Value of fruit in diet.
(*b*) Work on notebooks.
Lesson 18. Log Cabin salad.
(*a*) Value of fruits, continued.
(*b*) Making cooked dressing.
Lesson 19. Corn bread.
(*a*) Use of sour milk and soda.
(*b*) Wheat substitutes.
Lesson 20. Preparation for and planning menu of luncheon.
Lesson 21. Luncheon.
Lesson 22. Written lesson. Notebooks.
Problem III. What can I learn to cook which I can make at home for my family?
Lesson 23. Russian salad.
(*a*) Use of left-over vegetables.
(*b*) Review cooked salad dressing.
Lesson 24. Omelet.
(*a*) Structure and food value of eggs.
(*b*) How to cook eggs.
Lesson 25. Brown bread.
(*a*) "War breads."
Lesson 26. Honey cookies.
(*a*) Sugar substitutes.
(*b*) Places to serve drop cookies.
Lesson 27. Cornstarch puffs.
(*a*) Wheat substitutes.
(*b*) How to make cake batter light.
Lesson 28. Housecleaning.
(*a*) Learning how to clean certain parts of house.
(*b*) How to clean dresser at home.
Lesson 29. Written lesson. Notebooks.
Lesson 30. Ice cream.
(*a*) Food value of ice cream.
(*b*) Party lesson.

*Problem B.* Clothing — (See problem of the year.)
30 lessons. (1 double period weekly.)
Problem I. Learning to sew on machines in order to do things quickly.
Lessons 1–3. Demonstration and use of the Singer and Willcox

and Gibbs machines. Practice straight lines on paper and cloth. Hemming towel by machine.

Problem II. Making a knitting bag that would be useful as a Christmas gift, or for the Girls' League Fair.

Lessons 4–11. Buying materials, planning and making bag.

Problem III. Making an apron suitable to wear in the studio for painting, or to cover dress while working in garden or at home.

Lessons 12–24. Suitable materials, amount and cost of same. Making simple kimono draft on blocked paper, and then on material by means of pins and tape measure.

Cutting and making apron.

Problem IV. Care of clothing to keep it in good condition and make it last longer.

Lessons 25–30. Stocking darning, mending, repairing, packing clothing away for winter.

NOTE. In case of war necessity Red Cross work will be substituted for the above problems — *e.g.* Hot-water bag cover, bandaged foot bed socks, leggings, comfort kits, repairing garments for refugees, etc.

### II. HIGH SCHOOL (GRADE VIII)

*Problem for the year.*

President Wilson's proclamation, April 15, 1917.

"Let me suggest — That every housewife who practices strict economy puts herself in the ranks of those who serve the nation. This is the time for America to correct her unpardonable fault of wastefulness and extravagance. Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty, as a dictate of patriotism which no one can now expect to be excused or forgiven for ignoring."

People talk of the high cost of living and the great waste in our homes. Why is this true? In what ways can I learn to save money, materials, and strength in my family?

2 double periods weekly, 160 minutes.

*Correlated Studies.*

Science. 3 40-minute periods.

Mathematics. 5 40-minute periods.

Art. 1 double period of 80 minutes.

*Clothing and Textiles. 30 lessons, 1 double period weekly.*

*Problem A.* Of the many things that I have need, what can I make that will be helpful with the home sewing and that I shall like to wear?

Problem I. Making an outing skirt.

Lessons 1–10. Discussion of materials as to suitability, durability, design, cost, etc.

Shopping trip to buy materials.

Cutting, making, hanging, and finishing simple straight skirt.

Problem II. Planning an allowance.

Lessons 11–13. Planning a wardrobe, making lists of clothing, required amount.

Cost of clothing — comparison of ready-made and home-made as to cost, durability, etc. Thrift in relation to selection. Planning girls' own allowance.

Problem III. Making a middy blouse.

Lessons 14–30. Use of commercial patterns.

Cutting and making middy from same.

NOTE. In case of war necessity, Red Cross problems will be substituted, *e.g.* hospital garments, work for refugees.

*Problem B.* In what way can I save in preparing foods, or economising time and effort in housekeeping?

Foods, nutrition, and sanitation.

30 lessons. (1 double period weekly.)

Problem I. One great means of saving is wise spending.

Lesson 1. Budget.

(*a*) What proportion of family income is spent for food.

(*b*) Budgets and accounts.

Lesson 2. Marketing.

(*a*) Wise selection.

(*b*) How to avoid waste.

Lesson 3. Nutritive value of foods we buy.

(*a*) Comparative food values and costs of common foods.

Problem II. Patriotic conservation of food is more important than personal economy.

Lesson 4. Canning.

(*a*) Cold pack method.

(*b*) Conservation of perishable food.

Lesson 5. Canning or jelly making.
Lesson 6. Griddle cakes.
(*a*) Corn meal as a wheat substitute.]
(*b*) Action of baking powder.
Lesson 7. Oat flour or barley muffins.
(*a*) Ways to use substitute flours.
Lessons 8–9. Bread.
(*a*) The yeast garden.
(*b*) Ingredients in bread and their functions.
(*c*) Kneading and baking.
(*d*) Characteristics of a good loaf.
Lesson 10. Beans.
(*a*) Food value and cost.
(*b*) Prepare mock sausage and soup.
Lesson 11. Dried fruits.
(*a*) Helping to use food supply.
(*b*) Prepare prune salad and stewed peaches.
Lesson 12. Rice.
(*a*) Suggest ways to use rice.
(*b*) Rice pudding with fruit sauce.
Lesson 13. Notebooks, written lesson.
Lesson 14. Milk.
(*a*) The great food value of milk.
(*b*) Prepare cream soup.
Lesson 15. Milk, continued.
(*a*) Our patriotic duty to use milk.
(*b*) Prepare cottage cheese.
Lesson 16. Uses for left-over bread.
(*a*) Prepare English monkey.
(*b*) Suggest various uses.
Lesson 17. Uses for left-over meat.
(*a*) What it means to "Hooverize."
(*b*) Stuffed peppers.
Lesson 18. Planning a "conservation luncheon."
(*a*) Suitable menu.
(*b*) Plan of work.
Lesson 19. Serving the luncheon.
Problem III. Our thrift must include the saving of labor as well as of food.

Lesson 20. Planning a practical kitchen.
(*a*) Walls, floors, etc.
(*b*) Furnishings.
Lesson 21. Kitchen continued.
(*a*) Placing equipment to save steps.
(*b*) Labor-saving devices.
Lesson 22. The work of the house manager, for one week.
(*a*) Planning the week's work.
(*b*) Preparation for laundry lesson.
(*c*) Removing stains.
Lesson 23. Laundry.
(*a*) Washing laboratory caps and aprons.
Lesson 24. Laundry.
(*a*) Ironing garments washed in previous lesson.
Lesson 25. Care of an invalid.
(*a*) Simple comforts.
(*b*) Preparing a tray.
Lesson 26. Cleaning.
(*a*) What cleaning means in a kitchen.
(*b*) Clean refrigerator, sinks, and garbage pails.
Lesson 27. Baking.
(*a*) Bake cup cakes.
(*b*) How to handle cake batter.
Lesson 28. Entertaining guests.
(*a*) Need for simplicity in entertaining.
(*b*) Plan conservation refreshments for different occasions.
(*c*) Prepare fruit salad.
Lesson 29. Notebooks. Written lesson.
Lesson 30. Picnic luncheon.
(*a*) Prepare salad and sandwiches.

### III. HIGH SCHOOL (GRADE IX)

*Problem for the year.* In what ways may the household arts studies contribute to the health, comfort, and beauty of our home and of our community?

Course A. A study of the home. 30 lessons, 1 double period weekly required.

*Correlated Studies.* 2 periods, 40 minutes each, hygiene and sanitation.
3 periods, 40 minutes each, business arithmetic.

*Problem A.* What should I know in choosing a house in order that it may be a home? (Fine Arts aspect.)

Lesson 1. Selection of home.

Site, neighborhood, view, architecture.

Lecture showing different types of domestic architecture, ancient and modern, abroad and in America.

Sketches of fine Colonial doorways.

Lesson 2. Floor plans.

Type of house — city or country — large or small.

Arrangement of rooms for comfort, economy of space, convenience, beauty.

Planning of small sketches for original floor plan. Criticism of plans.

Lesson 3. Floor plans made to scale.

Lesson 4. Decoration of home.

Museum trip to see furniture, rugs, textiles.

Students make sketches of furniture best liked.

Lesson 5. Discussion of a room.

Use, size, need for open spaces. Make a drawing of one wall of room, placing windows, doors, moldings.

Lessons 6–7. Study of furniture.

Study of good lines, fine proportions, workmanship.

Review museum trip for study of period furniture.

Types suitable for different uses.

Draw furniture on different plan. Arrange for fine space.

Continue. Paint furniture.

Lesson 8. Study of textiles used in furnishings. Kinds of textiles. Their uses. Show samples used for different purposes. Use of plain and figured. Apply to room being designed.

Lesson 9. Color. Color theory taught. Color scales made.

Lessons 10–11. Color in the home.

General color idea. Effect of different colors in large and small, dark and light rooms.

Wall paper. Select good examples for different rooms from sample books. Effect on size and exposure of rooms.

Paint walls.

Continue and finish interiors.

Lesson 12. General criticism.

Lesson 13. Pictures in the home.
Selection of pictures for different rooms.
Proper hanging of pictures.
Lesson 14. Costume.
Lecture on history of costume.
Lesson 15. Appearance.
Suitability to individuality, to occasion.
Use, cost, durability, style.
Types of people. Lines suitable to different types.
On hektograph model design school dresses in line. Criticism of spacing.
Lesson 16. Plan dark and light spacing.
Lessons 17–18. Color in costume.
Types of coloring in people. Colors suitable to them. Try on samples. Paint dress.
Lesson 19. Design and paint summer dress for friend.
Lesson 20. Examination.

*Problem B.* What should the high school girl know in order to appear attractive and to be well dressed at home and at school?

Lessons 21–26. Discussion on the meaning of:
Personal cleanliness.
Cleanliness of dress.
Neatness of appearance.
Good taste in dress.
Responsibility of choosing clothes wisely and economically.
Responsibility for the care of clothes.
Ways of helping at home.
Laboratory work in the removal of stains and spots; washing of collars, cuffs, ties, gloves, sweaters, etc.

*Problem C.* What are the duties of a manager of a home?
(Sanitation and management aspect.)

Lesson 27. The varied duties of the housekeeper outlined.
(*a*) Care of girls' bedroom.
Lesson 28. Wise spending of the family income.
(*a*) Budgets and accounts discussed from point of view of girl's allowance.
Lesson 29. Planning the meals for the family.
(*a*) Planning a meal illustrated by planning schoolgirls' luncheon.

Lesson 30. Our duty toward food, conservation.
(a) Canning.

Course B. 30 lessons. (Elective.)

*Problem A.* What can I make in this class that will help me to carry out some of the ideas I have gained in my costume design work?

15 lessons. (1 double period weekly.)

Problem I. Planning, cutting, making a smock.

Lessons 1–15.

NOTE. If war necessity requires, the making of Red Cross garments will be substituted.

*Problem B.* What can I learn about foods which will enable me to choose my luncheons wisely?

Lesson 1. Canning.
(a) Why the whole country wishes to preserve fruit for winter use.

Lesson 2. Fruits.
(a) Prepare apple sauce and prune salad.
(b) Meaning and uses of minerals in fruits.

Lesson 3. Vegetables.
(a) Why we should use a great deal of vegetable food.
(b) How to cook vegetables.
(c) Prepare creamed potatoes and creamed onions

Lesson 4. Rice with tomato sauce.
(a) Starch experiments.
(b) What starch does for the body

Lesson 5. Muffins.
(a) Starch continued.

Lesson 6. Caramel sauce.
(a) Value of sugar in the diet.
(b) Various forms of sugar.

Lesson 7. Notebooks, written lesson.

Lesson 8. Caramel custard.
(a) Eggs as a body builder.
(b) How to cook eggs.

Lesson 9. Tuna fish salad.
(a) Value of meat.
(b) Quantity of meat needed.

Lesson 10. Sandwiches.
(*a*) Use body makes of fats.
(*b*) Butter and butter substitutes.
Lesson 11. Milk.
(*a*) Food value of milk illustrated by making butter and cottage cheese.
Lesson 12. Cocoa.
(*a*) Plan well chosen luncheon menus from Horace Mann lunch room menu cards.
Lesson 13. Plan and discuss menus.
(*a*) Plan luncheon to be served by class.
Lesson 14. Serve luncheon.
Lesson 15. Written criticisms of a collection of luncheon menus.

NOTE. Attention is called to the Bulletin published by the Commonwealth of Massachusetts. Board of Education, Boston, 1916, Number 29, whole number 78. Household Arts, Teachers Manual and Course of Study for Grades 7 to 10 inclusive may be found in libraries. Out of print.

## WORCESTER GIRLS' TRADE SCHOOL, WORCESTER, MASS.

### HOMEMAKING COURSE OF FOUR YEARS

To the Day School trade departments of Dressmaking, Millinery, Machine Operating and Cooking, we have added a department of Homemaking. It was found that many of the girls taking up Dressmaking really wanted it for home use exclusively. The trade course did not provide for the home side of the problem in all the essential details, and so the new department was organized to give the girl who does not expect to become a wage-earner upon graduation an opportunity to prepare herself for efficient work in the home.

The course is outlined for four years. The first two years will prepare a pupil in the practical work of sewing, mending and millinery; cooking and cleaning, laundering, home decoration, and the art and academic subjects related to them. The third and fourth years will give these subjects from the more mature and scientific point of view.

The following outline will show how these subjects are proportioned.

#### HOMEMAKING COURSE — FIRST YEAR

*Sewing — 12 hrs.* Elementary processes, plain and fancy stitches, applied in simple underwear, curtains, table covers, and other household furnishings, as well as textiles of all materials used.

*Cooking — 9 hrs.* Recipes for simple home breakfasts and lunches; preparation and service of school luncheon; care of supplies and left-overs.

*Laundering — 3 hrs.* Treatment of white and colored goods used in sewing class.

*Applied Art — 4½ hrs.* Color, line, and design in theory and applied in decoration of things made in sewing.

*English — 1½ hrs.* Writing of business and social letters; forms of invitation and acceptance; ordering of goods and correct bill forms and receipts; descriptions of articles made and to be copied.

*Arithmetic — 1½ hrs.* Review of fundamental operations as used in sewing and cooking; reckoning costs; extending bills to verify amounts.

*Physical Education — 2½ hrs.* Corrective and recreative exercises; hygiene, anatomy, and physiology.

*Music — 1 hr.* Choral work at assembly times.

*Use of Leisure Time — 1 hr.* Games and home reading.

HOMEMAKING COURSE — SECOND YEAR

*Sewing — 9 hrs.* Mending, darning, renovating materials in making over a dress; simple house dress; fine hand work on collars, a set of fine underwear, table linen, and other lines of needle work.

*Millinery — 6 hrs.* Trimming a simple winter hat; renovating materials; simple bindings and facings; altering wire frames; straw sewing.

*Cooking and Allied Science and Sanitation — 12 hrs.* Home dinners; preserving and pickling; practical physics as plumbing, ventilation, lifting without strain, etc.; practical chemistry as cleaning, laundry work, electric batteries, etc.; botany in the form of flowers to be raised for decoration.

*Applied Art — 1 hr.* Making designs for embroidery; sketches for made-over dress; color combinations in dress and hat; shapes for hats, lines for dress; copying models for dresses or hats.

*English — 1 hr.* Descriptions of dresses and hats; compositions correlating science and practical subjects.

*Industrial History — 3 hrs.* The home from primitive times to the modern one with all the evolution involved.

*Physical Education — 2 hrs.* Gymnastics; care of the body to keep it pure and clean.

*Music — 1 hr.* Assembly singing.

*Use of Leisure Time — 1 hr.* Games and home literature.

HOMEMAKING COURSE — THIRD YEAR

*Sewing — 9 hrs.* Use of commercial patterns and enough pattern construction to know how they are made; cutting and fitting of house dresses.

*Cooking — 9 hrs.* Marketing; making out menus; serving meals; setting and decorating tables; preparing whole meal for family; use of cook books.

*Laundering — 3 hrs.* Care of table linen and fine hand-made garments; removing stains; bleaching, etc.

*Home Decoration — 3 hrs.* Furnishing a complete house in theory and practice, furniture for sitting room, dining room, bedroom, and kitchen, as well as bathroom.

*Arithmetic — 2 hrs.* Estimating cost of food in marketing, menus, furnishings, clothing, etc.

*Textiles — 3 hrs.* Fabrics for home and personal use from raw material to manufactured goods.

*Applied Art — 2 hrs.* Study of pictures to be used in homes; color schemes for homes; table decorations, menu cards, and place cards, etc.

*Civics — 3 hrs.* Laws of municipal housekeeping; public hygiene and sanitation.

*Physical Education — 1 hr.* Exercises.

*Music — 1 hr.* Assembly.

HOMEMAKING COURSE — FOURTH YEAR

*Sewing — 6 hrs.* Draping without the use of patterns; making graduation dress and things for family; children's clothing.

*Millinery — 6 hrs.* Making winter hat of velvet; making fancy summer hat; complete construction of simple home-made hat.

*Cooking — 7½ hrs.* Dietetics; food values; meat substitutes, etc.; food for children and invalids.

*Sanitation — 4½ hrs.* Housewifery; care of floors, walls, windows, "housecleaning" clothes closets; bathrooms; beds; insects of all kinds.

*Art of Home — 2 hrs.* Plans for a house; placing of steam and water-pipes; closet spaces; convenience of arrangement, etc.

*Science — 3 hrs.* Chemistry of foods; diets; effect of chemicals in cleaning, etc.; botany in vegetable gardens and use of product.

*Economics — 3 hrs.* Consumer *vs.* producer; woman's value in the home *vs.* the shop; family budgets as well as personal budgets.

*Nursing — 2 hrs.* Care of the invalid as well as of children.

*Physical Education — 1 hr.* Exercises.
*Music — 1 hr.* Assembly.

Such a scheme can only be worked out in connection with a model home which is under full control of the school. This was made possible by the generous offer of the free use of the building at No. 63 Grove Street, owned by the Logan, Swift and Brigham Division of the United States Envelope Company. This house consists of four tenements of four or five rooms each and needed more repairs than it was economical to make as an investment; as a project for the Boys' School Classes it was a rare opportunity and under their hands one tenement has been put in good shape and has been furnished by the Girls' School Classes. The boys installed a small steam heater with five radiators (for two tenements), wired the rooms and cellar for electricity, laid three hardwood floors, built a china closet in the dining room and rearranged the kitchen pantry, made over a small room as a bathroom, put new wainscoting in the kitchen and painted all the woodwork and kitchen and bathroom walls. The papering and ceilings were done by outside workmen, as those trades are not taught in the school.

The Girls' Homemaking Classes have chosen the wall papers (having removed the old paper), selected the style and quantity of furniture and dishes; selected, made and put up the curtains, hemmed the table linen, scalloped and crocheted edges of doilies, marked towels, and estimated all expenses involved.

Now that one tenement is completed, the second one is to be repaired and furnished and later the third and fourth. Each one will be worked out in a different way, so as to furnish new problems — all within the possibility of tenement home living.

No one will live in the building at 63 Grove Street permanently; it is to be the school "home." The pupils will keep the rooms in order; certain classes will meet in them as in any home where a group may collect; individuals and groups will be assigned to prepare and serve home meals with teachers and pupils as the "family"; there will be the utmost freedom to use every corner as if it were a real home.

Much work will also be assigned to be done in the pupil's own home and school credit given for that which is done satisfactorily. This will necessitate the teachers' visiting the homes and keeping in close touch with the mothers.

The regular classroom work — lessons which require tables and chairs and school equipment — will be in the School Building, for they can never be conducted under home conditions. This makes the need of a larger

building all the more imperative. About half the girls now enrolled in the school are in the Homemaking Department, and the proportion will increase. Girls will not be allowed to remain in the trade courses unless well adapted to them, for in this general course is the all-around training which all girls need and not the specialized work of a trade suited to those of special ability. It will strengthen our trade courses at the same time that it will give what the average girl most needs.

### Trade Courses Offered in Day School

1. Dressmaking; 2 years.
2. Power Machine Operating; 2 years.
3. Millinery.
4. Trade Cooking.

Every girl's program includes

| | |
|---|---|
| One Trade | 22–25 hours per week |
| Cooking | 3 hours per week |
| Art | 3–4½ hours per week |
| Class work as English, etc. | 3–4½ hours per week |
| Gymnastics | 1½ hours per week |

### Outlines of above Trade Courses and Studies Supplementary to the Trades Chosen

Dressmaking. This is a two-year course for girls who, after a thorough test, show ability to become good trade sewers. A third year is offered for those who are capable of becoming independent workers in the trade.

*First Year — Elementary Sewing.* — All the stitches and processes involved in garment construction learned in making aprons, underwear, middy blouses, children's clothing, etc.

*Preparatory Dressmaking.* — Shirt waists, plain skirts, nurses' uniforms, cotton house dresses. Practice work on waist and skirt finishing and dress trimmings.

*Second Year — Dressmaking Shop.* — Work on custom orders for dresses of cotton, woolen, silk, voile, chiffon, etc. The work is done as in any good custom shop, employing the latest methods in every detail. The pupil should be a good finisher by the end of this year, capable of assisting in any shop.

*Third Year.* — For the girl who has initiative and can give another year, there will be offered experience in simple cutting, fitting, and more ad-

vanced lines of construction. This additional year will enable the girl to assist in customers' homes or to take in work in her own home.

POWER MACHINE OPERATING. This is a trade offering steady employment, and one in which many women are engaged in Worcester. The course is a two-year one and prepares the girl to work on corsets, underwear, shirt waists, shirts or any line of work involving expert machine stitching. Those who show ability are taught the use of special machines as tucker, buttonhole, two-needle, and hemstitching.

*First Year.* — Learn to control the power and to use a variety of materials in simple garments involving fundamental stitches, processes, and construction, such as aprons, underwear, blouses, etc.

*Second Year.* — A more varied application of the skill acquired in the first year in the construction of complicated garments, approach to trade speed, and the use of special machines.

MILLINERY. This is a trade which offers many artistic possibilities to a girl with talent for it, but the seasons are so short that it is impossible to depend upon it for a livelihood. The slack season must be filled in with some other employment, which, if steady, soon takes the place of millinery.

The course includes making bandeaux, frames and covering the same, preparing trimmings, putting on facings, bindings and the lines of preparing required of a milliner's assistant. Considerable hand sewing accompanies this training to enable the pupils to supplement it with good sewing.

TRADE COOKING. This is a trade which requires special ability and should not be undertaken unless a girl is adapted to it. Admission to it will be only after consultation with the Director as to aim and qualifications for it.

SUPPLEMENTARY SUBJECTS. Every girl entering a trade course also has lessons which consider the facts already acquired in other schools and apply them to the new line of thought which the pupil is following. There are no textbooks in these subjects, so the work is all class work during school hours.

## ACADEMIC COURSES

*First Year.*

1. Arithmetic.
   (1) Arithmetic, work-room methods, necessary drills, etc., given only part of the year except with low-grade pupils.

(2) Advanced trade arithmetic.
   *a.* Shop organization.
   *b.* Estimate for material.
   *c.* Economy in cutting — relation of width of material to cost, etc.
   *d.* Estimating cost of single garments, and garments duplicated in quantity.

2. English.
   (1) *a.* English, oral and written, as related to trades.
   *b.* Spelling trade terms and phrases and words in common use.
   *c.* Writing.
   (2) *a.* Written and oral directions for making garments or parts of garments.
   *b.* Business letters — orders — application for positions, etc.

*Second Year.*

1. Textiles.
   *a.* Study of quality, weaves, textures, adulterations, etc., through practical tests.
   *b.* Short history of development of textiles in common use with their relation to women's work.
2. Industrial history and geography as related to women's work.
3. Apportionment of income — expenditure.
4. Citizenship.

### Cookery Courses

*First Year.*

1st period 9.00 to 10.30 A.M.

1. Care of supplies from the market. Preparation of vegetables, meats, desserts, and soups that require more than one hour for preparation and cooking. Cooking of these dishes begins during the first period of the morning and, if incomplete, is finished by next class.
2. Shaping and setting rolls to rise.

2d period 10.30 A.M. to 12 M.

1. Preparation of meats, desserts, quick soups, quick breads, such as biscuits, muffins, etc., requiring less than an hour for cooking.
2. Baking of rolls and bread set previously.
3. Arrangement of dining room.
4. Serving luncheon to pupils and teachers.

3d period 1.00 to 2.30 P.M.

1. Washing dishes, care of sink, refrigerator, towels, etc.
2. Preparation of stock soup.
3. Care of left-over food.
4. Setting bread and rolls for baking next day.
5. Desserts, such as lemon jelly, blanc-mange, etc.
6. Cooking of foods that require slow cooking, such as ham, which can continue cooking without special attention.

*Second Year* (elective).

1. Planning menus to given costs.
2. Buying, cooking, serving of meals for from six to eight people.
3. Canning, preserving, pickling.
4. Elementary food chemistry.

Second year classes meet in the afternoon and give more time to theory and independent work than first year pupils.

### Physical Education

1. Light gymnastics.
2. Dancing.
3. Personal hygiene — care of eyes, teeth, the throat and ears, etc.
4. Corrective exercises.

### Unit Courses in Sewing and Dressmaking. Evening Classes, 1918–1919

MONDAY AND WEDNESDAY OR TUESDAY AND THURSDAY

1. Plain sewing for those who know nothing of sewing; 6 weeks or 12 lessons.
   Class I, Straight Apron, Dressing Sack.
   Class II, Corset Cover, Night Gown.
2. Plain skirt of cotton material; School pattern; 6 weeks or 12 lessons.
3. Plain skirt of cotton material; Pupil's pattern; 6 weeks or 12 lessons.
4. Advanced skirt of woolen or fancy material; 6 weeks or 12 lessons.
5. Plain shirt waist of cotton material; School pattern; 6 weeks or 12 lessons.
6. Plain shirt waist of cotton material; Pupil's pattern; 6 weeks or 12 lessons.

7. Plain shirt waist of fancy material; 6 weeks or 12 lessons.
8. Fancy waist for those competent; 6 weeks or 12 lessons.
9. Waist and skirt draping, 6 weeks or 12 lessons.

| | |
|---|---|
| Class I, waist. | Class III, waist. |
| Class II, skirt. | Class IV, skirt. |

Classes will begin in each of the above subjects 4 times a year when there are applicants for them.

10. Advanced dressmaking using woolen or fancy material; 12 weeks or 24 lessons.
11. Millinery, 4 weeks, or 8 lessons; advanced work for former pupils.

If a group of fifteen women, competent to do the work, make application, classes will be organized in *Shirt Making, Children's Clothing, Underwear*, or other subjects to be suggested.

## DEPARTMENT OF EDUCATION, NEW YORK CITY

### Manhattan Trade School for Girls, 22nd St. and Lexington Ave.

#### COURSE OF STUDY

The course of study at the Manhattan Trade School is planned for girls who enter some line of employment as soon as possible after the compulsory school attendance is completed. The majority of these girls cannot spend more than one year for training and provision is therefore made for a course of study extending over one year, with opportunity for advanced work in any subject if girls can remain a longer time.

While the course is planned to extend over one year only, the daily sessions are longer, and the vacations shorter than the high school, so that the actual number of hours of instruction given in a year at the trade school is 1540 as compared with 965 given in the high schools, or nearly one and two-thirds of the high school year.

About five hours each day or twenty-five hours per week are devoted to trade practice, and the remaining time to related subjects.

The instruction is individual, and girls are promoted as rapidly as their work will permit. The approximate amount of time required to complete each grade is indicated in the table.

A diploma is given to girls who complete the year's course in any one of the following trades:

COURSES OFFERED

A. TRADES. (Each trade course requires one year to complete.)

1. *Dressmaking.*

Grade I. — Elementary Sewing.
Hand and machine practice; making school work aprons, gymnasium bloomers, and worker's equipment. 6 weeks

Grade II. — Intermediate Sewing.
Children's dresses, rompers, guimpes, and undergarments. 6 weeks

Grade III. — White Work.
Fine hand and machine-made underwear, using embroideries, laces, insertions, etc. 6 weeks

Grade IV. — Wholesale Class.
Speed tests in hand and machine-made garments. 3 weeks

Grade V. — Elementary Dressmaking.
Shirt waists, linen, cotton, and lawn unlined dresses. 3 months

Grade VI. — Advanced Dressmaking.
Lingerie blouses, street and evening gowns of silk, chiffon, velvet, etc. 3 months

2. *Millinery.*

Grade I. — Elementary Sewing, as for dressmaking, with special emphasis on hand sewing. 4 weeks

Grade II. — Elementary Millinery.
Linings, bands, frames, facings, covering frames, etc. 3 months

Grades III–IV. — Making Hats in Spring and Winter Materials, — straws, silks, velvets, malines, etc. 5 months

3. *Lamp Shade Making.*
A short course in candle and lamp shade making is included in the millinery course, as the seasons in millinery are short, and girls who learn both lines of work can secure steadier employment. 3 months

4. *Clothing Machine Operating.* (Electric power machine; no hand sewing.)

Grade I. — Elementary Operating.
General control of machine; making operator's equipment, work apron, sleeves, etc., practice stitching on simple garments. 2 months

Grade II. — Children's dresses and simple under-

garments; use of attachments for hemming, tucking, ruffling, etc. 2 months

Grade III. — Shirt waists, negligees, petticoats, and women's underwear. Special emphasis on speed practice. 3 months

Grade IV. — Filling of special orders on women's and children's dresses and other garments, made in a large variety of materials. 3 months

Grade V. — Special machine practice on hem-stitching, scalloping, and embroidery machines. 2 months

5. *Embroidery Machine Operating Course.*

Grades I–III. — In clothing machine operating as above. 7 months

Grade IV. — Special Machines for,

(1) Bonnaz embroidery including chainstitch, cording, braiding, on pillow covers, dress trimmings, etc.

(2) Singer embroidery on shirtwaists, fancy collars, dresses, table linen, underwear, etc.

(3) Stamping and preparing of patterns for embroidery. 5 months

6. *Straw Machine Operating Course.*

Grades I–II. — Same as clothing machine operating (see above). 4 months

Grade III. — Hats made of coarse, inexpensive straw, in simple shapes, such as sailors, sun hats, etc. 2 months

Grade IV. — Hats made in every variety of expensive straw, chip, hemp, milan, fancy straws, etc., in difficult shapes. 6 months

7. *Sample Mounting.*

Consists of the mounting of cotton, woolen, and silk dress goods samples, all kinds of novelties, such as braids, embroideries, laces, ribbons, etc. Also the making of sample book covers, cases, etc. 1 year

NOTE. While the entire course in sample mounting requires 1 year, a course in plain mounting may be completed in 6 months.

8. *Novelty Case Making.*

Grade I. — Elementary sample mounting. 2 months

Grade II. — Making of fancy cases, desk sets, scrap baskets, and a large variety of novelties in cretonnes, brocades, and other materials. 10 months

B. Other Subjects. (Taught in relation to trades.)

Unless otherwise stated, the following subjects are required for a certain number of periods only, depending upon previous preparation of girls.

1. *Business Arithmetic.*

Practice problems in measurements, in buying and estimating materials, in keeping accounts, etc.

2. *English.*

Spelling, and use of terms, applications for positions, bills, receipts, descriptions of garments, etc.

3. *Design.*

Embroidery design, perforating, and stamping of patterns, color and costume design.

Required, — three hours per week, throughout the course.

4. *Textiles.*

Study of cotton, wool, flax, and silk; tests for different fabrics; study of weaves, prints, dyes; names of common fabrics with their uses, prices, width, durability, etc.

5. *Industrial Problems.*

Factory system, division of labor; sweatshop work; work of Consumers League, Trade Unions, Child Labor Committee; labor laws relating to women and girls; factory inspection, sanitary requirements, etc.

6. *Physical Training.*

Physical examinations and "follow up" work to see that each girl is physically fit to enter her chosen trade. Special attention to personal cleanliness, care of eyes, teeth, etc. Gymnastic exercises for body building, standing and sitting postures, etc.

Required, — throughout the course.

7. *Cooking.*

Preparation of food for the school luncheon served to pupils and teachers each day.

# INDEX


Academic Course in high school, 126; Home Economics in, 126.
Adaptations of subject matter in rural schools, 231.
Administrative problems, 319.
Adolescent age: physical and mental changes in, 311.
Agriculture: for vocational home making courses, 237.
Aims in instruction: achievement of, 332, 333; of Home Economics in Grades 7 and 8, 104; of elementary school, 91.
Aims of Home Economics, 40, 41.
Aims of various organizations in teaching Home Economics, 248.
American home, 37.
Americanization: opportunities for the teacher of Home Economics to promote, 291.
Art and Home Economics: as applied to dress, 76; as applied to home, 77.
Associations: membership in, 349; American Home Economics, 349; National Education, 349; National Vocational, 349.

Babies: care of, 200; plan for lesson on care of, 278.
Barber, Fred D.: quoted on reorganization of high school science, 74.
Beecher, Catherine, 45.
Bibliography: division of, 420; *general references*, — equipment, 429; general teaching method, 423; girl, 426; government and state publications, 443; history of home economics, 428; modern educational aims, 420; special teaching method, 424; teacher, her responsibilities, 428; vocational education, 425; *subject matter references*, — care and feeding of children, 431; cleaning, hygiene, and sanitation, 430; cookery and table service, 429; foods, 432; home nursing, 435; household furnishings, 433; household management, 435; laundering, 436; nutrition, 437; science, 438; sewing, dressmaking, and millinery, 438; textiles and clothing, 439; textbooks, — elementary school, 441; secondary school, 441.
Bonser, Frederick G.: quoted on industrial arts, 92.
Books: use of, 417; text, for elementary schools, 441; text, for secondary schools, 441; reference, 420–443.
Budget: plan for lesson on, 280; making for the department, 328.
Buildings: rural school, 213; equipment and, 230.
Bureau: of education, 48; of Home Economics, 48; children's, 48.
Business methods: between teacher and tradespeople, 321; between teacher and school board, 321.

Camp Fire Girls, 33, 263.
Charters, W. W.: quoted on the project in home economics teaching, 109.
Chemistry: and Home Economics, 75.
Children: bibliography of feeding of, 431; care of, 199, 200.
Church: educational work of, 32; its place in life of colonial girl, 6.
Church schools: early work in Home Economics, 258; International Association of Daily Vacation Bible Schools, 258–259; trained teachers for direction of work in, 258.
Cleaning: bibliography of, 430; equipment for teaching, 394–395.

Clothing: bibliography of, 439; equipment for teaching, 387–389, 405; plan for lesson on, 270; problems of, for farm woman, 201; scope of, in 7th and 8th grade courses, 107–113; suggestions for series of lessons, — in Grade 7, 114–117; in Grade 8, 119–121.
Clubs: a feature of school work, 205; agricultural, 35, 204; budget, 257; canning, 204, 264; Eight Weeks, 35; girls', 204; Home Economics, 35; in Y. W. C. A., 264.
Coeducation: a factor in progress of women, 30.
College entrance: units for, 126; requirements for, 127.
Colleges: their help in developing Home Economics, 47.
Commercial course: Home Economics in, 150.
Community centers: possibilities for work in Home Economics, 257.
Community interests: advantages to girl in sharing in, 363; discrimination in introduction of, 371; opportunity for large quantity cookery through, 363. See also Suggestions for coöperation with.
Consolidated schools: Home Economics in, 228.
Continuation school: courses in Home Economics in, 185; pupils in, 185, 186; training teachers for, 355.
Cookery: bibliography of, 429; lesson plan in, 274.
Cooking schools: in answer to need, 45; early development of, 46.
Coöperation: need for, among teachers and departments, 73; provision for, in school, 29.
Corporations: educational work of, 34.
Correlation of school subjects: in elementary school, 67; in high school, 67; in response to need, 65; misuse of, 66–71; need for care in use of, 66; opportunities for, with Home Economics, 67.
County Farm Bureau, The, 203.
Country girls: opportunities for, 242; vocational education for, 241.
Country life, 194.
Courses of study: continuation school, 185; day vocational school, 187; evening school, 181; four year high school, academic, 126; general, 141; normal training, 136; vocational, 150; *home-making* and, — care of children, 184; clothing, 184; food, 183; health, 185; housewifery, 184; management, 185; junior high school, 168; senior high school, 176; survey, 129; trade unit, 182; vocational guidance, 133.
Credit: for home economics work, 106.
Crete plan, 215.
Curriculums: changes in, 29; correlation of subjects in, 65; crowded rural school, 212; need for unification of, 64.

Dame School, The, 22.
Day nursery, 34.
Dean, Arthur D.: "Our Schools in War Time and After," quoted, 362.
Democracy: in schoolroom practice, 24, 28; Dewey on, 84.
Development of home economics: in response to girls' needs, 38; through colleges, 47; by scientists, 46; through other agencies, 48.
Devices: labor-saving, on the farm, 195; schoolroom, 311; skill in use of, 317.
Dewey, John: quotation from "Schools of To-morrow" — urges democratisation of education, 84.
Differentiation: below sixth grade, 86.
Discipline: relation to management, 319.
Division of work: among teachers, 320.
Dressmaking: bibliography of, 438, 439; equipment for teaching, 387–389, 405. See also Courses of study.

Education: attempt to make democratic, 83; early attitude toward, 21; important subject of study, 23; new purposes in, 25.
Education of girls and women: early attitudes toward, 21; factors in progress of, 30; for use of leisure time, 15; modern ideals in relation to, 23.
Educational agencies: response of, 20.

Educational aims and ideals: books in relation to, 420.
Educational work in factories and department stores, 260–262.
Efficiency: classroom, 309; factors that contribute to, 309.
Elementary education: changes in, 24; early attitude toward, 21; present tendencies, 23.
Elementary school: its aims and purposes, 85, 91; differentiation of interests at end of sixth year, 85; preparation of teacher for, 350; problem of maintaining democracy in, not difficult, 85; reasons for shortening period of, 85; time for acquiring elements of education, 85; various lengths of period, 85.
Equipment: attention to, 316; bases for selecting type of, 375–376; bibliography of, 429; disadvantages in use of regular classroom, 378; *for teaching*, — care of children, 396; foods and cooking, 378, 379, 388–394, 401–404; general discussion of, 374; home nursing and hygiene, 397; keeping in good condition, 317; laundering and housewifery, 394–395; sewing, textiles and clothing, 378, 379, 387–389, 405; for practice house, 518–521; for preparation of family-sized recipes, 379; for preparation of hot lunch, 209; purchase of, made part of girls' training, 376; for organisations other than schools, 385–386; relation of type of, to aim of school, 376; starting with meager, 374–375; storage space, 379; teacher's desk, 379; for technical training, 385; various types of, 386; various schemes of arrangement, 377; unit kitchen, 409–413.
Evening classes: Home Economics in, 182; pupils in, 181; training of teacher for, 355.
Evolution of Home Economics: early records, 42; kindergarten movement, 45; kitchen garden movement, 42; manual training movement, 42.
Exhibits and illustrative material, 398.
Extension classes: a phase of rural high school, 241.
Extension of teaching field in Home Economics due to instruction offered by other organisations, 249.
Extension teaching: a part of the educational program, 31; in rural communities, 241; a factor in rural progress, 202.

Family, The: scope of study in relation to, 107.
Farm home, The: importance of, 195; need for better, 196; for use in teaching home economics, 230.
Farm women: help for, 198.
Federal Acts and Bills: Lever, 49; Smith-Hughes, 27, 49, 153; Smith-Lever, 48, 203, 213; Smoot, 49.
Flexibility: need for, in organisation of courses, 100; of courses, produced by war, 107.
Food: bibliography, 432; problems in, for farmer's wife, 200; studies in, for Grades 7 and 8, 107–112, 114, 117, 119–121; plan for a lesson in preparation of, 274.
French, Martha H.: quoted on correlation of art with sewing, 76.

General course: Home Economics in high school, 176.
General education: Home Economics for, 176.
Gill, Laura Drake: "A Creed of Work for Women," 15.
Girl, The: as home-maker, 40, 56, 58, 61; as wage earner, 41, 56, 59, 60; books in relation to, 426; understanding needs of, 105.
Girls' Clubs: agricultural, a feature of school work, 35, 204, 205; budget, 257; canning, 204, 263–264; co-operation between leaders of, and teacher of Home Economics, 264; Eight Weeks, 35; Home Economics, 35; educational work of, 35, 263–264.
Girl Scouts: an educational agency, 33; Promise, 262; Home Economics as stimulated by tests of, 263.
Government publications, 443.
Grand Rapids high schools: cited, 87.
Gulick, Luther H.: defines woman's share in affairs of government, 13; home versus school training in Home

Economics, 6; quoted in relation to enlarged vision of women, 11.

Health: function of school to promote, 26; home-making unit course in, 185.
Higher education of women, 30.
High school: aims and purposes of, 87; courses in, 125; defined, 86; difficulty in classification indicative of adaptation to demands, 87; four-year courses in, see courses of study; Home Economics in rural schools, 234; junior, 168; scope of, 86; senior, 176; small, 179; teachers in, 351–354; types of secondary education, 86.
Home, The: American, 37; as basis for work in Home Economics in eighth grade, 119–121; as a social force, 12; change in activities of, 8–9; colonial, 4; effect of economic and social changes upon, 8; influence of, 38; importance of home environment in rearing children in orphanage, 260; modern, compared with colonial, 8; place of, in maintaining efficiency of the household, 12; three phases of social fitness toward which it should contribute, 12.
Home Demonstration Agent, The, 203.
Home Economics: a social study, 338; aim of, in schools, 40, 41, 57, 103; basis for organization of courses in, in eighth grade, 118; in seventh grade, 112; books in relation to history of, 428; breadth of, 51; bureau of, 48; conditions for teaching, in technical schools, 377; contribution of scientists to, 46; definition of, 50; early interests, 45; early records, 42; evolution of, 41; flexibility in teaching, 338; for general appreciation, 39; for home-making, 40, 61; for technical training, 377; for wage earning, 41, 60; for vocational purposes, 40, 60; in elementary schools, 91–121; in high schools, 125–179; in rural schools, 205, 211; Industrial Arts as a form of organization of, 92; need of girls as a basis for planning courses, 105; outlines of scope of studies in, 49, 52–54; responsibility of, in schools of to-morrow, 57, 59; scope of, in Grades 7 and 8, 106; stimulated by demands made during World War, 248; suggestions for lessons in, 114–121; the teacher of, 361; value of, in schools of to-day, 38.
Home-life classes, 383.
Home-making, 40, 56, 58.
Home-making course: in Worcester Trades School, 155; related studies in vocational, 152; Smith-Hughes requirements for, 153.
Home nursing: bibliography for, 435; equipment for teaching, 397.
Home visiting: on part of teachers, 248.
Home work: school credit for, 207.
Hoover, Herbert: standard set for simple living, 14.
Hot lunch: basis for work in Home Economics, 217; equipment for, 209; in rural schools, 207; organization for, 211; values of, 208.
Household Arts: aim of, 56; for all girls, 56, 58.
Household furnishings: bibliography, 433.
Household management: on the farm, 198; bibliography, 435.
Housekeeping: laboratory, 326.
Housekeeping Center Association, New York City: cited, 247; description of work, 256.
Hygiene: bibliography, 430; relation to Home Economics, 72, 73.

Ideals: teacher's, 343.
Illustrative material: effective use of, 317, 398–401; importance of, 398; wise choice of, 398–401.
Importance: of discrimination in introduction of community interests, 371; of projecting ideals and processes in Home Economics into home experience of girls, 247; of study of social conditions as basis for later responsibility of women as citizens, 363; of understanding home conditions of girls, 248.
Industrial Arts: as a basis for Home Economics, 97; as a form of organization of elementary school

subjects, 92; as a means of unifying curriculum, 67, 92; definition of, 92; discussion of, 67; examples of organization of, 68–70; examples of industrial arts work in second, third, and fifth grades, 96, 98; scope of, 92; the teacher of, 99; values of, 92.
Industrial courses: dressmaking, 162; food, 165; laundering, 167; millinery, 163; place for, 161; time in, 156; vocational, 156.
Industrial Education Association, 44.
Industry: practice in, 158; preparation for, 156; work in, 156.
Instruction: aims of, 332–334; measuring, 334, 339; standards for judging, 333; quality of, 332.
International Association of Daily Vacation Bible Schools, 258–259.
Interrelation of school and world interests, 359.

Jackson, Henry E.: "A Community Center," 257.
Junior High School: aim of Home Economics in, 169; Home Economics for girls leaving, 174; organization of, 168; preparation of teachers for, 350.
Junior Red Cross, 264–265.
Journalism: as a vocation in the field of Home Economics, 418.

Kilpatrick, William Heard: quoted on the project, 110.
Kindergarten movement: aims, 45; relation to Home Economics, 45.
Kinne, Helen: cited, 292.
Kitchen Garden Movement: aims of, 43.
Kittredge, Mabel Hyde: cited as head of Practical Housekeeping Center Association, 247.
Knowledge: of home conditions necessary in planning lessons, 248, 289; teacher's, of pupils, 309.

Laboratory: equipment, 316–377, 409–413; housekeeping, 326; management, 299; products, 326.
Laundering: bibliography, 436; equipment, 394–395.
Leadership: importance of wise, 35.
Legislation: Lever Act, 49; Smith-Hughes Act, 27, 49, 153; Smith-Lever Act, 48, 203, 213; Smoot Act, 49.
Leisure: teaching wise use of, 27–28.
Lesson plans: characteristic lessons in Home Economics, 269; budget, 280; care of baby, 278; care of clothing, 270; food preparation, 274; form of briefer, 284; importance of enriching lesson beyond plan as formulated, 307; necessity for, 269; type of, 269; wise use of, 307.
Liberal education: Home Economics for, 176.
Literature: available in Home Economics, 417–443; importance of learning how to use, 417.

Management: a phase of teaching, 309; laboratory, 299, 326.
Manual Training Movement, 42.
Mathematics and Home Economics, 60, 70, 75, 212.
McMurry, Frank M.: cited, 305.
Measurement: possibility in the field of, 335, 339.
Men and boys: importance of teaching, in home-making problems, 257; significance of their interest in home problems, 360.
Mental attitude of class, 311.
Methods: best possible in Home Economics, 335, 338; books in relation to, 423–424; changes in, 29; experimentation, 340; factors in judging, 335; high school course in, 139; judging, 333; new, 28; of attacking lessons, 293, 303; of instruction, 334.
Millinery: bibliography, 438.
Mitchell, Ruth Comfort: poem, "Barbara," 372.
"Model Flat": a natural setting for teaching Home Economics, 247, 256.
Modern education: based upon survey of pupil and community, 88.
Moral welfare, 26.
Mothers' helpers, 257.
Motive: provision for, 312.

Needs of the girl: development of Home Economics to meet, 38;

necessity for understanding of, in planning courses, 105, 248.
New York Orphanage, 16, 383.
Normal training: in high school, 136.
Nutrition: bibliography, 437; problems for farm women, 201.

Organisation of Home Economics: as a development of other subjects in the curriculum, 99; examples of, in fifth and sixth grades, 98–101; in clothing, 107; Industrial Arts as a form of, 92; in first six grades, 92, 100; in foods, 108; in Grades 7 and 8, 103–107; need for flexibility of, 100; other schemes of, 99; summary of principles of, 102; the project and problem method of, 108.
Organisation of material: need for securing, on part of pupils, 112.
Organisation: social, of school, 318.
Orphanages and other institutional homes, 259–260; New York Orphanage, 260; use of home in teaching Home Economics to groups of girls and boys in, 259, 260.
Over-age children: provision for general education in practical arts for, 86.

Parker, Samuel Chester: quoted in relation to use of time, 298.
Parloa, Maria: work of, 44.
Participation in life activities, 359, 361.
Philanthropic organisations, 34, 249.
Physical condition: of classroom, 315; of pupils, 310.
Physics and Home Economics, 74.
Planning the lesson, 292–307; adaptation to needs of class, 294; basis of selecting methods, 303; division of subject matter among various lessons, 301–302; economy of time through, 294; foresight in planning lessons, 288; "form" versus "formality," 292; illustrative material, 305; importance of clear conception of complete process on part of pupil, 299; importance of a definite objective, 293; importance of "connecting links" between lessons, 297; importance of providing sufficient time for practical work, 299, 300; importance of unbroken discussion period, 300; power of imagination in "living the lesson," 293; problem of class of first importance, 296; problem underlying development of individual lesson, 289–292; selection of subject matter, 300–302; statement of aims, 295–297; statement of main questions, 304; suggestions for most effective use, 305–306; summary, 305; the "problem" the basis, 292; various methods to be emphasized, 303; various types of questions, 305; ways and means of presenting subject matter, 302–305; see also lesson plans.
Plans, see Lesson plans.
Practical Housekeeping Center Association: see Housekeeping Center Association.
Practice house: advantages in use of, 382; equipment for, 518–521; outside the school, 384; "teacherage" as, 385; used in combination with school laboratories, 385; work in, 148, 154.
Problem method: as a basis of organisation, 108; suggested series of lessons based upon, 114–121.
Progress: Keeping up with, 349.
Project method: advantages of, 111; defined, 109; distinction between "project" and "problem," 109; in teaching of Home Economics, 109; limitations of, 111.
Purchasing supplies: clothing and textiles, 322; food, 323.
Purposes: in education, 25; use of children's, in planning courses of study, 111.

Questions: statement of main, 304; various types of, 305.

"Ready-made" course of study: adaptations necessary, 290.
Recommendations for departments, 328.
Related subjects, 153.
Relation of Home Economics to life interests, 306, 307, 360.
Religious organisations, 249.
Report of Committee on Social Studies: quoted, 361.

Richards, Mrs. Ellen H.: books of, 47; life of, 47; work of, 47.
Routine: establishing, 314.
Rumford, Count: work of, 46.
Rural conditions, 194.
Rural schools: conditions, 211; consolidated, 228; consolidated high, 89; "grammar high," 89; Home Economics in, 193–243; need of trained teachers for, 136; special forms of organisation, 88.
Rural school lunch: see Hot lunch.
Russell, James E.: quoted on Industrial Arts, 68.

Sanitation: bibliography of, 430.
Schemes of reorganisation of elementary and high schools to promote spirit of democracy, 84.
School lunch room: advantage of, co-operation with, 300, 302; as laboratory for technical training, 385; for utilisation of food products, 380. See also Hot lunch.
School organisation: adaptation of, in effort to make education democratic, 83.
Science: and Home Economics, — Chemistry, 75; General Science, 65, 72–74; Mathematics, 75; Physics, 74; Social Sciences, 77–79; bibliography of, 438; in rural high school, 236.
Scope of Home Economics, 49; outlines showing, 51, 52, 53, 54.
Secondary schools: early, 22; in rural communities, 234; value of, 124.
Senior high school: Home Economics in, 176.
Separation of laboratory and discussion periods, 298.
Series of lessons on homemaking as presented to girls in a city school, illustrating employment of world interests, 369–371.
Sewing: bibliography of, 438.
Shelter: scope of, in Grades 7 and 8, 107–114; suggested series of lessons in, 116.
Small high school: aim of, 179; equipment of, 180; Home Economics in, 179; teacher of, 179.
Smith-Hughes Act, 49; vocational home-making under, 153.
Smith-Lever Act, 48; influence of, 203.
Social centers: aim of work in Home Economics in, 252; Americanisation through work in, 253; importance of coöperation of workers in, and community, 254; importance of inclusive scheme of work in, 252; nature of work in, 252; qualifications for a supervisor of home-making classes in, 253; satisfaction resulting from work in, 255; suggested units of work in, 253; teaching cooking in, 253; teaching sewing in, 253; utilisation of skill of women in community, 254–255.
Social conditions: study of, gained through visits to factories, bakeries, dairies, markets, etc., 363.
Social organization: a factor in management, 318.
Social Science: and Home Economics, 71; History and, 71.
Special problems: providing supplies, 323; disposal of laboratory products, 326.
Speed: learning to acquire, 315.
Staff meetings, 329.
Standards: in elementary school work, 333; factors in measuring, 335.
Stevens, Romiett: quoted, 305.
Studies in Home Economics: breadth of, 51; defined, 50; for boys, 49; outlines of, 52, 53, 54; scope of, 49.
Subject matter: Home Economics for rural school, 218; suggestions for choice of, 302.
Suggestions for coöperation with community interests: assisting farmers' wives, 367; charity organisations, 367; church suppers, 365; committees for relief of suffering, 368; community canning kitchens, 366; day nurseries, 366; family dietaries, 366; family visiting, 367; home economics department a distributing agency for literature, 368; home for aged and orphans, 366; hospitals, 366; publicity work, 366; American Red Cross, 368; repair of household furnishings, 367; renovation and repair of clothing, 368; school gardens, 368; school lunch room, 300, 302, 365, 380, 385; survey of markets, 366.

Supervisor of Home Economics: duties of, 356; training of, 355; qualifications of, 253, 356.
Supplies: buying and storing, 321; clothing, 322; food, 323; for laboratories, 316; providing special, 323.
Survey: of home and community conditions as basis for organization of Home Economics, 105; of other school work as basis of correlation, 105.
Survey course, 129.
Surveys: Butte, 169; Indiana, 159; Minneapolis, 159.
Sykes, Frederick Henry: quoted from "Social Basis of the New Education of Women," 11, 18; quoted on responsibility of women in making the "larger home," 11.

Table service: bibliography of, 429.
Talbot, Marian: comments on life of colonial girl, 7.
Teacher of Home Economics: as citizen and community leader, 348; bibliography in relation to responsibility of, 428; helpful, 343; investigation and study necessary on part of, 289; judging the, 346; need of adaptation of personality to type of position, 249, 265; need for vision and power in, in promoting best ideals of education, 361; personality card, 344; preparation of, see Training of teachers; preparation of, for lessons, 269–270; progress of, 346; responsibility in serving the community, 360; responsibility in supporting dietary laws and fast days, 254; should maintain her interest in experimentation, 303.
Teacherage, 214.
Teachers College: beginnings of, 44.
Teachers' meetings, 329.
Terminology: common useful, 55; confusion of, 55; Home Economics, 56; home-making, 40, 56, 61; household arts, 55, 56, 58.
Textbooks: bibliography of, for elementary schools, 441; for secondary schools, 441; general discussion of, 418; two classes of, 419.
Textiles: bibliography of, 439.
Time: saving of, 313; wise use of pupils', 298, 313; teaching how to save, 314.
"Tools of learning," 85, 86.
Training of teachers of Home Economics: for continuation and evening classes, 355; for elementary schools, 350; for junior high schools, 350; for rural schools, 136; for senior high schools, 351; for vocational home-making classes, 352, 353, 377; for vocational industrial studies, 354.

Unification of curriculum: industrial arts as a means of, 67; in upper grades of elementary school, 70; modern tendency in education toward, 64; need of, 64.
Unification of interest and purpose of all members of group due to utilization of community interests, 364.
Unit kitchen, 376, 377, 380–381; equipment for, 409–413.
Units: continuation courses in, 185; courses divided into, 129; evening courses in, 182; for college entrance, 126; definition of, for college entrance, 128; home-making, — care of children, 184; clothing, 184; food, 183; health, 185; housewifery, 184; management, 184.
Universal education: promoted by readjustment of school organization, 87.
Utilization: of community interests in the teaching of Home Economics, 362; of various schoolrooms for teaching phases of Home Economics, 376–377.

Value: of early establishment of ideals of classroom management, 290; of interrelation of home economics education and community interests to the girl, 361; to community in utilization of interest and powers of girl, 364.
Various schemes of school organization: 6–3–3, 6–2–4, 6–4–2, 8–4–2, 88.
Virginia Irwin Memorial School: description of work, 255.
Vocational courses in high schools: agriculture, 152, 237; commercial,

150; demand for, 159; home-making, 152; industrial, 156, 159.
Vocational education: books in relation to, 425; for country girls, 241; industrial, 41, 56, 59, 60; home-making, 40, 56, 61; United States Census, 40, 59, 60.
Vocational guidance, 133.
Vocational home-making, 40, 56, 58, 61.
Vocational home-making studies: training of teachers of, 353.
Vocational industrial studies: training of teachers of, 354.
Vocational schools: all-day, 187; Home Economics in, 187; trades in, 188.
Vocational secondary education: bulletins of United States Department of Education, 42, 55, 56.
Vocations for women: United States Census 1910, 40, 59, 60; industrial pursuits, 41, 56, 60; home-making pursuits, 40, 56; professional pursuits, 40.

Wage earning, 41, 59, 60.
War: effect in strengthening relationship between home economics education and the home, 360.
Weet, Herbert S.: quoted on 6-3-3 plan of organization, 86.
Willard, Mrs. Emma Hart: work of, 45.
Winslow, Anna Green: selection from diary, 6.
Woman: as home-maker and wage earner, 16; need of training for dual responsibility, 17.
Woman's sphere: extension of, 9, 10.
Woman who earns, The: educational needs of, 17.
Women: as citizens, 13; as home-makers, 14; as wage earners, 16; division of time between individual home and larger home, 15; enlarged vision of, 11; responsibilities of, 64.
Women in colonial times: centralization of social life in home, 5; education in Home Economics, 5; interchange of service, 5; participation in home duties, 3.
"Women's League": in John Wanamaker Stores, 262.

Young Women's Christian Association: an educational agency, 32; Boston School of Domestic Science, 252; Central Branch, New York City, 250; St. Louis, 250-252.

Printed in the United States of America.